

HANDSWORTH
URBAN DISTRICT.

REPORT

ON THE

Sanitary Condition of the District

FOR THE

Year ended December 31st, 1909,

TOGETHER WITH

REPORT

On the Medical Inspection of School Children under the
Education (Administrative Provisions) Act, 1907,


BY

WILLIAM SISAM, M.D., B.Sc., D.P.H.,

Medical Officer of Health and School Medical Officer.

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ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

ON THE

Sanitary Condition of the District

FOR THE YEAR 1909.

TO THE CHAIRMAN AND MEMBERS OF THE URBAN
DISTRICT COUNCIL OF HAMPTON WICK.

GENTLEMEN,

I have the honour to present to you my first Annual Report upon the Mortality, Health and Sanitary Condition of your District for the year 1909.

The principal events during the year have been:—

- (1) The epidemic of Measles in January and February and the outbreak of Scarlet Fever in October and November.
- (2) The decision of your Council to pay the usual notification fee for the Voluntary Notification of Pulmonary Tuberculosis.
- (3) The decision of your Council to join the Clinical Research Association affording facilities to General Practitioners for the examination of sputum in suspected cases of Pulmonary Tuberculosis and for the examination of secretions in suspected cases of Diphtheria.

- (4) The negotiations for the renewal of the agreement with the Kingston Corporation for the disposal of Hampton Wick sewage.
- (5) Improvements effected in the Mortuary accommodation.

All these matters will be dealt with at length in this report.

SITE, AREA, PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

The Urban District of Hampton Wick is situated in the extreme south-eastern part of the Parliamentary Division of Uxbridge in the County of Middlesex. The District is bounded by the Urban District of Teddington on the north and by the Urban District of Hampton on the west. The River Thames flows along its eastern and southern borders for a distance of over three miles. It separates the district from the Urban Districts of East Molesey, Thames Ditton, Long Ditton and Surbiton and from the Borough of Kingston-on-Thames. A bridge, over which trams run, connects the village with the town of Kingston, and public ferries connect the district with Surbiton, Long Ditton, and Thames Ditton. There is also a small portion of the district, about three acres in extent, situated about 200 yards north of the north-west corner of the parish which is entirely detached from the rest of the district. This detached piece of land is bounded on the north and east by Teddington and on the south and west by Hampton. A house with a garden and meadow attached occupies that area.

In the Ordnance Survey, 1894-1896, the upper island in the River Thames off Thames Ditton is shown as belonging to the Parish of Hampton Wick. This appears to be an error, as on investigation it has been found that this island is not included within the boundary of the Parish of Hampton Wick, and that it is part of the Parish of Hampton.

The District is coterminous with the Parish. The Parish was originally part of the Parish of Hampton, but was formed into a Civil Parish in the year 1831.

The principal events in the history of the Parish since that date are as follows:—

1831. Formation of the Parish of Hampton Wick.

1863. Formation of the Local Board.

Opening of the London and South-Western Company's branch line from Twickenham to Kingston, with a railway station in the Parish, and a bridge carrying the railway over the river.

1866. A Medical Officer of Health appointed to the Board.

1890. Arrangement entered into with the Kingston Corporation to deal with the Hampton Wick Sewage.

1894. Formation of the Urban District Council.

1903. Opening of the London United Tramways Company's line through the District from Teddington to Hampton Court.

1905. Opening of the London United Tramways Company's line over Kingston Bridge.

It may here be mentioned that the Postal District of Hampton Wick does not coincide with the area administered by the District Council. The Postal District includes parts of South Teddington and excludes that portion of the district known as Hampton Court. The area of the district is 1,315 acres. It is almost flat, and is situated on a gravelly soil. By far the greater portion, about 1,100 acres, is within the Home and Bushy Parks and the gardens belonging to Hampton Court Palace.

The district contains 80 acres of water, the greater portion of this area being in the River Thames. The boundary of the district runs in the centre of the river. There is, besides, a stretch of water about $\frac{3}{4}$ -mile long, known as the Long Water or Long Canal, and also in both parks there are several large-sized ponds.

The number of inhabited houses in the district amounted to 530 on the 30th of June, 1909. There are a good many unoccupied houses in the district, chiefly houses of a fair size. No house has been pulled down during the year, but a few new ones have been built.

POPULATION.

The population of the district varies little from year to year. The average number of persons living in each house in this district is five; so the population may be estimated at 2,650 persons. This number is arrived at by multiplying the average number of persons living in each house at the time of the last census by the number of occupied houses in the middle of the year.

In the following table is given the enumerated population at the date of the Census of the years 1881, 1891, and 1901, and the estimated population for the year 1909. The Census figures refer to the early part of the year, whilst the estimate refers to the middle of the year:—

POPULATION (Enumerated).			Population estimated middle 1909.
1881	1891	1901	
2162	2378	2606	2650

BIRTHS.

There were 47 births registered in the district during the year. The following table shows how this number is made up :—

	MALES.	FEMALES.	TOTAL.
Legitimate	22	22	44
Illegitimate	2	1	3
Total	24	23	47

This number is higher than usual and compares favourably with the average number of births for the last ten years. This amounts to 44. The birth-rates for various localities are set out in the following table :—

	1908	1909
England and Wales	26.6	
London	25.2	
County of Middlesex	25.5	
District of Hampton Wick	15.01	17.74
District of Hampton Wick, average for preceding 10 years	18.26	17.24

DEATHS.

The actual number of deaths registered in the district during the year amounted to 32. By including deaths of residents taking place outside the district and

by excluding deaths of non-residents occurring in the district, we obtain the nett number of deaths belonging to the district. This amounts to 35. The following table shows more clearly how this number is arrived at:—

	M.	F.	TOTAL.
Deaths registered in the District	22	10	32
Deaths of Hampton Wick Residents in			
1. Kingston Union Infirmary	—	1	1
2. Cottage Hospital, Teddington	5	—	5
3. Other places	1	—	1
Complete Total...	28	11	39
Deaths of Non-Residents—			
1. Drowned in the District ...	3	—	3
2. Died whilst visiting the District... ..	—	1	1
Total	3	1	4
Deducting these deaths from the Complete Total we obtain the Nett Total of all deaths belonging to the District	25	10	35

This gives a nett death-rate of 13.21 as against 10.94 per 1,000 persons living for the previous ten years, and as against 13.51 for 1908.

In order to compare this death-rate with the death-rates in other districts, the age and sex distribution of the population as shown at the time of the last Census must be taken into account. This is arrived at by multiplying the nett death-rate by a factor which has been specially calculated for this district. The factor amounts to 1.02716. The death-rate of Hampton Wick so corrected amounts to 13.57.

In the following table the death-rates for England and Wales and other important localities can be compared with the Hampton Wick death-rates:—

	1901	1908	1909
England and Wales... ..	16.9	14.7	—
London	18.7	14.5	14.0
County of Middlesex ...	14.0	11.4	—
Hampton Wick—			
Recorded or Nett Death Rate	13.8	13.5	13.2
Corrected Death Rate ...	14.2	13.9	13.6
Average Death-rate for preceding 10 years ...	12.9	11.0	10.9

As the population of Hampton Wick is very small, the death-rate for one year has but little value for purposes of comparison, but the average death-rate for a period of ten years may be compared with the death-rates of other districts, and is a fair estimate of the health of the district.

In the following table is given the death-rates of deaths actually occurring in the district for certain years and the average death-rates for the preceding ten years. The nett death-rates are not given because prior to the year 1903 they had but little value, the deaths of residents occurring beyond the district not being included.

Year.	Death-rate.	Average Death-rate for preceding 10 years.
1881	13.21	
1890	12.27	14.54
1901	14.58	12.74
1909	12.08	10.51

It is seen in this table, which ranges over a period of thirty years, that the average death-rate is steadily diminishing.

The various causes contributing to the deaths (fully corrected) belonging to the district of Hampton Wick are shown in Table IV. They include the following:—

	Under 65 years of age.	65 years of age and over.	TOTAL.
Measles	2	—	2
Tuberculous Diseases other than Pulmonary Tuber- culosis	2	—	2
Cancer	4	1	5
Bronchitis	—	2	2
Pneumonia	—	1	1
Pleurisy	—	1	1
Premature Birth	1	—	1
Diseases of the Heart	2	2	4
Suicides	—	1	1
Diseases of the Arteries	2	2	4
Diseases of the Nervous System	1	1	2
Diseases of the Renal System	2	1	3
Diseases of the Urinary System	1	1	2
Septic Diseases... ..	1	—	1
Diabetes... ..	1	—	1
Wasting Diseases	1	—	1
Other Causes	—	1	2
Total	20	15	35

Only one of these deaths occurred in an infant under one year of age, but there were four deaths in children aged between 1 and 5 years. Three-sevenths of the deaths occurred in persons over 65 years of age.

DEATHS OF NON-RESIDENTS OCCURRING IN THE DISTRICT.

The causes of these deaths are as follows:—

	Under 65 years of age.	65 years of age and over.	TOTAL.
Whooping Cough	1	—	1
Accidents	2	—	2
Suicides	1	—	1
	4	—	4

The Medical Officers of Health of the districts to which these non-residents belonged were notified. Three of them belonged to London and one to Kingston. During the last seven years fourteen non-resident persons have met their death in this district by accident or suicide, giving an average of two per year. The reason for this high average is that the River Thames borders the district for a distance of over three miles.

INFANTILE MORTALITY.

One death in an infant under one year of age occurred during the year. This gives an Infantile Mortality of 21.28 per 1,000 births. It is an exceptionally low mortality, but as has been pointed out many times in previous reports, this rate has but little value in a small district such as this, where there are only from 40 to 50 births in the year. I may point out that in the years 1899, 1903 and 1906 only one infant death was registered. The average Infantile Mortality for the previous ten years is 96.42, and, as is seen in the following table, this number compares favourably with other districts.

	1907	1908	1909
England and Wales ...	118	121	—
London	116	113	107
County of Middlesex ...	97	95	—
Hampton Wick	184	150	21
Hampton Wick, average for preceding 10 years ...	84	98	96

The infant who died was born prematurely and only lived a couple of hours.

In this district there is a Village Nurse whose salary is paid for by funds which chiefly come from the Parish Lands Trustees and to a lesser extent from subscriptions. She is under the control of the Vicar and myself. Besides her ordinary duties, she gives advice to mothers about the feeding and management of babies, and she attends confinements and attends to the mother and child afterwards, but this is done under the supervision of the patient's medical attendant. She also undertakes the duties of Infant Protection Visitor under the Children's Act, 1908. I am sure these measures tend to reduce the infantile mortality.

The Notification of Births Act has not been adopted in this district, and at present I do not think that there is any necessity for so doing, but I think it would be an advantage if a copy of the still-birth certificate for the burial of still-born children were forwarded to the Medical Officer of Health of the district to which the child belongs, by the superintendent of the cemetery to which the body of the still-born child is taken for interment. If this were done it would be possible to form some idea of and compare the health of child-bearing women in various localities, and, if necessary, measures might be devised to improve conditions supposed to cause such still-births. I do not think many still-births occur in this district.

PRINCIPAL EPIDEMIC DISEASES.

The diseases upon which the zymotic death-rate is calculated are the following:—

Small-Pox,
Measles,
Scarlet Fever,
Diphtheria,
Whooping Cough,
Fever (including Typhus, Typhoid and Continued Fever),
Epidemic Diarrhœa.

There were two deaths from these diseases during the year, both due to Measles. This gives a zymotic death-rate of 0.75 per 1,000 persons living.

The following table gives the zymotic death-rate in various localities:—

	1907	1908	1909
England and Wales	1.26	1.29	—
London	1.42	1.35	1.3
County of Middlesex ...	1.10	1.02	—
Hampton Wick	1.60	0.38	0.75

NOTIFIABLE INFECTIOUS DISEASE.

The diseases which are compulsorily notifiable under the Infectious Diseases Notification Act, 1889, are Small-Pox, Cholera, Diphtheria, Membranous Croup, Erysipelas, Scarlet Fever or Scarlatina, and the fevers known as Typhus, Typhoid or Enteric, Relapsing, Continued and Puerperal. Since January, 1909, Pulmonary Tuberculosis occurring in paupers is also notifiable. In addition a Local Authority has the power to add to the above list any other infectious disease by a resolution of which 14 clear days' notice has been given. Last April your Council decided to receive voluntary notifications of Pulmonary Tuberculosis in persons other than paupers. The Infectious Diseases (Notification) Act, 1889, was adopted in this district in 1890, and this year completes twenty years' working of the Act in this district. I have, therefore, inserted tables showing the number of notifications and the number of deaths from notifiable disease in each of the last twenty years.

NOTIFICATION OF INFECTIOUS DISEASE,
1890-1909.

YEAR.	Scarlet Fever.	Diphtheria	Enteric Fever.	Puerperal Fever.	Erysipelas
1890 ...	3	0	0	0	1
1891 ...	3	0	0	0	0
1892 ...	6	3	5	0	2
1893 ...	17	4	0	1	5
1894 ...	10	0	0	0	2
1895 ...	3	1	2	0	1
1896 ...	4	1	2	0	1
1897 ...	5	4	0	0	4
1898 ...	6	2	2	0	8
1899 ...	6	1	0	0	4
1900 ...	6	1	1	0	1
1901 ...	6	5	1	0	2
1902 ...	3	6	0	1	4
1903 ...	4	19	0	0	1
1904 ...	2	3	0	0	0
1905 ...	3	5	0	0	4
1906 ...	44	0	5	0	0
1907 ...	7	4	0	0	2
1908 ...	3	3	0	0	0
1909 ...	26	2	0	0	4
Total	167	64	18	2	46
Average per Year.	8'35	3'2	0'9	0'1	2'3

DEATHS FROM NOTIFIABLE DISEASES,
1890-1909.

YEAR.	Scarlet Fever.	Diphtheria	Enteric Fever.	Puerperal Fever.	Erysipelas
1890 ...	0	0	0	0	0
1891 ...	0	0	0	0	0
1892 ...	0	3	0	0	0
1893 ...	0	2	0	1	0
1894 ...	0	0	0	0	0
1895 ...	0	1	0	0	0
1896 ...	0	1	2	0	0
1897 ...	0	3	0	0	0
1898 ...	0	0	1	0	0
1899 ...	0	0	0	0	1
1900 ...	0	1	0	0	0
1901 ...	0	0	0	0	0
1902 ...	0	0	0	0	0
1903 ...	0	0	0	0	0
1904 ...	0	0	0	0	0
1905 ...	0	1	0	0	0
1906 ...	1	0	3	0	0
1907 ...	0	0	0	0	0
1908 ...	0	0	0	0	0
1909 ...	0	0	0	0	0
Total	1	12	6	1	1

On looking at these tables it will be seen that not a year has passed without cases of Scarlet Fever being notified, but that there has been only one death in 167 cases. Enteric Fever only appears from time to time, but it has the very high mortality of six deaths in eighteen cases. Puerperal Fever is not common; only two cases in 970 births with one death. Erysipelas one death in 46 cases. With regard to Diphtheria, it is difficult to compare the number of cases in recent years with the number in former years, as the diagnosis in this district since 1906 has been based on special examinations of the throat secretions, whereas previous to that date this was not usually done. But, anyhow, the mortality was extremely high during the first eight years under consideration. These are credited with ten deaths and only 13 cases were notified. About this time, however, the Anti-toxin treatment came into general use, and we find only two deaths occurring in the next twelve years, although 51 cases were notified. .

In the year 1909 there were notified 35 cases of infectious disease, three of these being cases of Pulmonary Tuberculosis in paupers. There were 26 cases of Scarlet Fever, four cases of Erysipelas, and two of Diphtheria. None of these cases proved fatal.

SMALL-POX.

No case has ever been notified in this district, and, as far as I know, no case has occurred since the seventies, but it must be remembered that cases have occurred in neighbouring districts as recently as the year 1903. The Vaccination Officer informs me that during the year there were 32 successful primary vaccinations, and that five children were exempted by "Conscientious Objection" Certificates in this district. I imagine that the majority of persons living in this district at the present time have been vaccinated in infancy. Very few persons, except in the time of a Small-Pox scare, are re-vaccinated, and those who are, are usually persons who are proceeding

abroad or who are about to enter a hospital or one of the public services, such persons generally belonging to the more wealthy or educated classes. I think it would be an advantage if parents were advised to have their children re-vaccinated between the ages of 12 and 14, and in my opinion this advice could best be given by the School Medical Officer. Otherwise when a Small-Pox epidemic does arise there will be a large number of persons inadequately protected from that disease.

SCARLET FEVER.

Twenty-six cases occurred and no case proved fatal. The number of cases was exceptionally high, and was, except in 1906, higher than the number of cases which occurred in any one year during the last twenty years. Most of the cases were notified in October, and most of the patients were between the ages of 5 and 15. Five of the patients were moved to Isolation Hospitals; the rest were treated in their own homes. One case was notified in May, but early in June an outbreak occurred in Kingston, the origin of which was traced to milk coming from the West of England. As the greater part of the milk supply for this district comes from the same part of England, I wrote a letter to the County Medical Officer of Health for Wiltshire asking him if the sources of the supply of milk for this district were free from similar contamination. In his reply he assured me that to the best of his knowledge the supplies of the Dairy Company in question were free from the contamination of Scarlet Fever, and that the farm presumed to be the cause of the outbreak had been indefinitely excluded from the dépôt. We had no cases in the district at that time. Had any of our milk come from that farm, we should probably have had an extensive outbreak. Four cases were notified in July, two of them occurring in the same house. The last of these cases was notified on July 24th.

After the summer holidays the Girls' and Infants' Schools were opened on September 6th and the Boys' School was opened on the 27th. On September 5th one

of the girls who had attended the Girls' School contracted the complaint, and about three weeks later another girl. Then arose a series of cases, the particulars of which are found in the following table:—

OUTBREAK OF SCARLET FEVER, SEPTEMBER-NOVEMBER, 1909.

INITIALS.	Sex.	Age.	Last day at School or at Work	Taken Ill.	Notified.	School.	Standard.	Source of Milk Supply
1. S. B. ...	F.	7	—	Sept. 5th	Sept. 14th.	Girls	1	A
2. { L. S. ...	F.	13	Sept. 24th.	Sept. 24th.	Oct. 2nd	Girls	5	B
3. { E. S. ...	M.	38	Sept. 29th.	Sept. 29th.	Oct. 2nd.	—	—	B
4. L. P. ...	M.	1½	—	Oct. 7th.	Oct. 9th.	—	—	A
5. E. C. ...	F.	7	Oct. 8th.	Oct. 10th.	Oct. 11th	Girls	2	A
6. K. B. ...	F.	8	Oct. 11th.	Oct. 11th.	Oct. 12th.	Girls	2	C
7. K. R. ...	F.	9	Oct. 11th.	Oct. 11th.	Oct. 13th.	Girls	2	D
8. { W. C. ...	M.	5	Oct. 21st.	Oct. 21st.	Oct. 22nd.	Infants	—	A
9. { E. E. F. ...	F.	6	Oct. 20th.	Oct. 20th.	Oct. 22nd.	Infants	—	A
10. { A. M. ...	M.	15	Oct. 21st.	Oct. 21st.	Oct. 23rd.	—	—	A & D
11. { G. M. ...	M.	21	Oct. 22nd.	Oct. 22nd.	Oct. 23rd.	—	—	A & D
12. { H. M. ...	M.	19	Oct. 23rd.	Oct. 23rd.	Oct. 25th	—	—	A & D
13. W. P. ...	M.	5	Oct. 22nd.	Oct. 23rd.	Oct. 25th.	Infants	—	A
14. { E. F. ...	M.	11	Oct. 25th	Oct. 25th.	Oct. 26th.	Boys	3	D
15. { E. F. ...	F.	2	—	?	Oct. 26th.	—	—	D
16. G. H. A ...	M.	11	Nov. 2nd.	Nov. 3rd.	Nov. 4th.	Boys	3	A
17. { B. F. P. ...	F.	5	Nov. 11th.	Nov. 11th.	Nov. 13th.	Infants	—	A
18. { L. D. P. ...	F.	2	—	Nov. 11th.	Nov. 16th.	—	—	A
19. A. T. ...	F.	7	Dec. 16th.	Dec. 17th.	Dec. 19th.	Private	—	C
20. { L. S. A. D.	F.	7	Dec. 10th.	Dec. 10th.	Dec. 26th.	Girls	1	A & D
21. { O. F. D. ...	F.	4	Dec. 10th.	—	Dec. 26th.	Infants	—	A & D

On looking at this table, it will be seen that up to October 11th five girls attending the Girls' School contracted the disease. This points to some source of infection in the school, which ceased to act in the second week of October. On October 22nd two children living in the same house and attending the Infants' School were notified, and at the same time three young men (brothers), living in the same house, contracted the disease. On November 5th, as the outbreak still lingered, and as two boys in the third standard had recently been notified, the School Medical Officer and myself examined the boys in standard three and the children in the Infants' School, but we could not find any undetected case. The outbreak gradually subsided in November; the last case was notified on December 26th. The cases were mostly of a mild nature. Three were sent to hospital, the others were treated in their own homes. The patients lived in various parts of the district, but no case was notified from the Hampton Court end. The milk was supplied from various sources. In the table different letters denote different sources of milk supply. Probably the outbreak would have assumed more serious proportions had it not been for the fact that there was a big epidemic in this district in 1906. The schools were frequently scrubbed and disinfected during the time of the outbreak.

DIPHTHERIA.

Two mild cases were notified, one in February and one in May. In one of these cases the rest of the members of the household were prophylactically injected with Anti-toxin Serum. In the case of persons unable to afford the expense, your Council will supply Anti-toxin Serum free of cost. Your Council have also arranged that swabbings taken from suspicious sore throats may be sent to the Clinical Research Association for diagnosis. I am sure these measures will be of great value in getting any threatened outbreak under control at an early date.

ERYSIPELAS.

Four cases were notified. No death occurred. This number is above the average for the last twenty years. It is difficult to say what are the causes which influence the appearance of this disease.

PULMONARY TUBERCULOSIS.

Three pauper notifications were received from the Kingston Union Infirmary. These cases occurred in paupers admitted into the Infirmary from houses in this district. The houses were visited and directions were given as to cleaning the rooms occupied by the paupers, and as to burning certain articles in them. No death from Pulmonary Tuberculosis was registered, but a death occurred in a person suffering from General Tuberculosis secondary to Psoas Abscess, and the lungs were involved in this case. After the death of the patient, the room he occupied was thoroughly cleansed and disinfected.

Early in the year a Memorandum was issued by the Medical Officer of the Local Government Board on administrative measures against Tuberculosis. Your Council considered certain of the provisions in this Memorandum, and it was decided to pay any doctor the usual notification fee for the notification of a case of Pulmonary Tuberculosis, such notification, however, being only given with the consent of the patient. Your Council also decided to pay the fees for the microscopic examination of sputum for the purpose of diagnosing suspected cases. Intimation of these measures was sent to about 16 practitioners residing in the neighbourhood, but up to the present time no voluntary notification has been received. The establishment of a County Sanatorium would be of great benefit in the treatment of this disease, as at present it is not easy to obtain beds for the working classes in existing sanatoria.

OTHER NOTIFIABLE DISEASES.

No case of Enteric Fever, Puerperal Fever, or Typhus Fever was notified during the year. I may here add that the question of extending the provisions of the Infectious Disease (Notification) Act, 1889, to cases of Glanders, Anthrax and Hydrophobia was considered by your Council early in the year. It was agreed that having regard to the exceedingly rare occurrence of any of these diseases in the district, no steps be taken in the matter.

NON-NOTIFIABLE INFECTIOUS DISEASES.

The diseases to be considered under this heading are Measles, Whooping Cough, Diarrhœa, Influenza, and Cancer.

MEASLES.

A severe outbreak of Measles occurred in the beginning of the year. The first case came under my notice on January 21st, and about a week later a great many children had contracted the complaint. On February 1st I forwarded the following letter to the Sanitary Authority of the Urban District Council of Hampton Wick, a copy of which was forwarded to the Local Government Board and to the Middlesex County Council:—

Hampton Wick,
February 1st, 1909.

*To the Sanitary Authority, Urban District Council
of Hampton Wick.*

Gentlemen,—

Owing to the prevalence of Measles in the district, I should advise you to close the Infants' School for a period of four weeks commencing February 1st.

On February 1st, out of 94 infants, 56 were absent. The children attending the Infant School vary in age between 4 and 7 years. At these ages children are very susceptible to the disease, and are liable to have it severely. The epidemic seems to be spreading largely among these children through the agency of the school. In this district the children do not come much into contact when they are not attending school.

There is, therefore, fair reason to assume that the epidemic may be lessened if this school be closed for a period of four weeks.

I remain, Gentlemen,

Your obedient servant,

H. A. GÜNTHER, M.B.,

Medical Officer of Health.

I did not advise the closure of the Boys' and Girls' Schools, as a great number of the older children had previously had the disease. In older children also the disease is not so dangerous to life. The Infant School re-opened at the beginning of March. The epidemic had then subsided. About 80 to 90 persons contracted the disease, and they were mostly under seven years of age. There were two deaths, both in pauper children, one was two and the other was three years old. The last epidemic in this district occurred in March and April, 1902. Other epidemics occurred in 1900, 1897, and 1892.

Every year sporadic cases occur, and there seems no reason why an epidemic should not be started at any time by one of them. Probably a large number of children in a district unprotected by previous attacks and exposed to infection is not alone sufficient to start an epidemic, but

other factors must also be present. Probably at the beginning of the year the general bodily condition of the children attacked was slightly below normal. The climatic condition or the mode of life induced by such climatic conditions may have been of such a nature as to cause an epidemic which developed with such extreme rapidity. Closure of schools would have been of little use if done on January 21st, on which date the first case came under my notice. The epidemic was in full swing ten days later. The incubation period of Measles varies from 10 to 14 days. Very few of the older children contracted the complaint, as most of them had had it before. I advised parents to continue to send such of their children to school who had previously had the complaint, even though living in infected houses. I doubt whether the disease can be conveyed by a third person.

WHOOPING COUGH.

A few sporadic cases occurred. One death was registered. This happened in a child who was brought into the district some weeks after she had contracted the complaint. Complications arose which caused her death. We have had outbreaks of this complaint in the years 1896, 1901, 1903, and 1907.

DIARRHŒA.

Very few cases occurred, and this was probably due to the mildness of the summer weather.

INFLUENZA.

There were a fair number of cases of a mild type in the beginning of the year. This complaint has been present off and on in this district since the year 1889.

CANCER.

Five deaths from this disease were registered. This amounts to one-seventh of the total number of deaths registered during the year. At the present time early diagnosis with operation is the only efficacious treatment known. Rooms which have been occupied by persons suffering from Cancer should be disinfected. In the last ten years 24 deaths have been registered as due to Cancer. This gives an average of 2.4 persons per year dying of Cancer in this district.

MIDWIVES ACT.

No certified woman residing in this district practises as a midwife. As far as I know medical aid was not needed during the year by any midwife practising in this district. The midwives practising in this district mostly reside in the County of Surrey. On the first day of April, 1910, section 1, sub-section (2), of the Midwives Act, 1902, comes into operation. It is to the effect that no woman shall habitually and for gain practise as a midwife unless she be certified under the Act. The exceptions are legally qualified medical practitioners and persons rendering assistance in cases of emergency. I do not contemplate any hardship arising in this district owing to shortage of midwives.

ISOLATION HOSPITALS.

Your Council has an arrangement with Hampton by which four patients can be admitted into the Hampton Isolation Hospital provided the beds are not needed. Two patients were sent to this hospital during the year, one at the Council's expense and one at the patient's own expense. Last November I wished to send a patient suffering from Scarlet Fever to the Hampton Isolation Hospital, but unfortunately all the beds were occupied. Negotiations were at the end of the year being entered

into with the Tolworth Joint Hospital Board for the maintenance of patients from this district, and are now proceeding. It would be to the advantage of this district to be able to send patients to Tolworth if the beds at Hampton were occupied and vice-versa. The Guardians of the Kingston Union have already made special arrangements with the Tolworth Joint Hospital District Board for the reception of cases of Scarlet Fever or Diphtheria occurring in the Scattered Homes in this district. Private patients with limited accommodation are usually recommended to apply for admission to the London Fever Hospital if suffering from Scarlet Fever. The charges are very moderate. The London Fever Hospital Authorities will, however, on no account admit pauper patients or persons paid for by any public authority. Three patients suffering from Scarlet Fever went to this hospital during the year.

This district has an arrangement with 13 other districts in Middlesex for provision for isolation of cases of Small-Pox at South Mimms. A notice was received at the end of the year about an enquiry to be held with a view of including the Urban District of Staines with the other districts.

DISINFECTION.

Disinfection of premises and clothes is carried out by means of Sulphur Dioxide Gas. This is generated by burning sulphur in infected rooms. This method is somewhat antiquated, and no doubt the use of the Formaline Spray would be more effectual. I think this question might be considered during the ensuing year. There is no special disinfector in use for clothes and bedding.

HOUSING AND THE HOUSING OF THE WORKING CLASSES ACT.

No action was taken under Parts I., II., and III. of the Housing of the Working Classes Act during the year.

I made a systematic inspection of the district in company with the Sanitary Inspector at various times during the year.

Cottages occupied by the Working Classes are situated in the following localities:—

High Street. Number of Cottages about 30
Five Alleys off the High Street—

(a) By the Railway Hotel—

Miles' Cottages	3
Hesley Cottages	3

(b) Between shops and Gravel Pit Hill—

Stanford Cottages	4
Fenner's Cottages	3

(c) Newman's Alley—

Newman's Cottages	12
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(d) Near the Swan Inn—

Godwin's Cottages	3
--------------------------	---

(e) Swan Alley—

Swan Cottages	2
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Hampton Court Road. The Walls	8
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Feltham Cottages	5
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Old Bridge Street	10
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St. John's Road. Tramway Cottages	10
--	----

School Lane	8
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Park Road about	35
------------------------	----

Lower Teddington Road	5
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Seymour Road	2
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King's Arms Yard. A large house split up into tenements	6
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Sandy Lane. Thatched House Cottages	4
--	---

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The Cottages built by the Tramway Company in 1904 are well-planned and are kept in very good order. Malthouse Cottages, Hesley Cottages, Stanford Cottages, Thatched House Cottages, and a few cot-

tages in the Park Road have been built within the last twenty years. All the rest are old, and some are extremely so. That these old houses were originally well built goes without saying, otherwise they would never have lasted all these years. They are all in fair repair and are fit for habitation. With few exceptions these cottages have fair-sized gardens attached, and this I consider very beneficial, as on that account there is plenty of open space around. In several cases where there are no gardens the cottages abut on one or other of the parks. On the whole the sanitary arrangements were found to be good. All without exception have W.C.'s with special cisterns. In nearly all cases the W.C.'s are separate from the house, and sometimes they are at some distance from the house. These W.C.'s have frequently to be inspected. For various reasons the flush is apt to become defective. This is usually due to some minor defect which is quickly remedied when attention is called to it, but if this is not done by someone in authority the tenants are generally slow to call attention to the matter. In one or two cases broken pans and seats were found. The owners' notice was called to such defects, which were promptly remedied. In one or two cases also damp walls caused by broken drain pipes were found. These were repaired on the owners' attention being called to the matter. There are three houses in the district closed and unfit for human habitation. They have been voluntarily closed by the owners. Two of them will probably be demolished at an early date. Two W.C.'s, which were formerly used by the inhabitants of houses, now closed or demolished, were found disused in a yard off Old Bridge Street. On representations being made to the agents of the property they were demolished. No complaints were received during the year from anybody concerning nuisances arising from the cottages. The cottages, with the exception of Feltham Cottages, are always occupied. No case of overcrowding came under my notice during the year.

TENEMENT HOUSES OR HOUSES LET IN LODGINGS.

There is only one house of this description in the district. It is an old house which has seen better days, and is now divided up into lodgings, each family occupying two or three rooms. The rooms are large and so are the windows. The house is clean and in good repair. There are no Bye-laws with regard to this class of house.

COMMON LODGING HOUSES.

There is one in the district now; there were two last year. It was inspected periodically, the arrangements being found satisfactory.

MOVABLE DWELLINGS, CARAVANS, TENTS, ETC.

In January and in March, caravans, with roundabouts, swings, and the various other paraphernalia which usually go to the making up of a fair, were placed on the same plot of vacant land as was occupied in a similar manner last year. There were about five caravans in January and four in March. The interiors of these caravans were extremely clean. A water closet was provided for the use of the people, and no complaints were received on the score of the sanitary arrangements. A death occurred in one of the caravans. It was due to Broncho-Pneumonia after Whooping Cough.

In April the plot of land was closed, and building operations were commenced on it.

SEWERAGE AND SEWAGE DISPOSAL.

Up to the year 1890 the Sewage of the district was either discharged into the River Thames or was dealt with by means of cesspits. The present method of Sewerage and Sewage Disposal dates from that

year. In that year your Council entered into an arrangement with the Kingston Corporation for the purpose of dealing with the Hampton Wick sewage at their works. The sewage was conducted to the works by means of a pipe carried over the Kingston Railway Bridge. This arrangement is due to expire in the year 1912. Negotiations are proceeding at the present time for the purpose of making a fresh agreement for a further period of years. The method in use is roughly as follows:—The sewage from the houses flows into the public sewers. These sewers conduct the sewage to ejectors by gravitation. There are four such ejectors in the district, two are in the Hampton Court Road, each having a capacity of 100 gallons; one near the entrance to Bushy Park opposite the Vicarage, also capable of holding 100 gallons; and two near the mortuary, each having a capacity of 150 gallons. When such an ejector becomes filled with sewage a valve is opened, and this allows compressed air to enter the chamber, the object being to force the sewage to a higher level, and at the same time another valve closes the inlet to the chamber. The sewage finally arrives by gravitation at the ejector near the mortuary, and then it is forced over the Railway Bridge to the Sewage Works in Kingston, where it is chemically dealt with in conjunction with the sewage from Kingston and Surbiton. This system of collecting sewage is known as the Shone System, and the arrangements for forcing the sewage to higher levels are known as Shone's Pneumatic Ejectors. This system works extremely well and no complaints were received. Nearly all the houses in the district are connected up, the exceptions being a few houses within or abutting on the Royal Parks, and which are at a great distance from other houses. Nearly all the surface drainage of the district flows into the river. I only know of one privy existing in the district, and I have reason to believe that it will be shortly converted into a water closet. It is not connected with a house.

WATER SUPPLY.

The whole district is supplied with water from the Metropolitan Water Board, the exceptions being a few houses the majority of which are in the Home and Bushy Parks. One sample of well water was submitted to me for analysis and was found to be good. The Engineer of the Metropolitan Water Board sent me 17 notifications of cessation of water supply to houses. These houses were kept under observation. They were empty and no nuisance was caused.

DAIRIES, COWSHEDS, AND MILKSHOPS.

There is one cowkeeper in the district. He has usually in his possession a dozen cows. These cows are periodically inspected by a veterinary surgeon with a view of detecting cases of Tuberculosis. His reports during the year have been satisfactory. The cowsheds, although old, are clean, and the cows are kept clean and are healthy. Milk is sold in three places in the district. The above-mentioned cowkeeper has a dairy. There is another dairy in the district which obtains its milk supplies from the Salisbury Dairy Company, and there is also a milkshop which is merely a depôt, the milk in this case being obtained from a dairy in Kingston, and, in turn, this dairy obtains its milk from the Salisbury Dairy Company. The milk-shops and the places for washing milk-cans and other utensils were frequently inspected, and were always found to be in a satisfactory condition. Under the heading Scarlet Fever I have mentioned what steps I took to find out if the milk in this district was free from the contamination of that disease. With the exception of the milk from the twelve cows, practically all the milk sold in this district comes from farms situated in the Counties of Surrey, Hampshire, Wiltshire, Dorsetshire, or Somersetshire.

Regulations for Dairies, Cowsheds, and Milkshops were adopted by your Council in September, 1896.

SLAUGHTER HOUSES.

There is now only one in the district. There used to be another in the Hampton Court end of the district, but this was done away with in 1905. There are three butchers' shops in the district.

The slaughter-house has existed in the same locality for a great number of years. I inspected it periodically, and always found that it was kept in a cleanly condition, and that there was proper accommodation for beasts and a sufficient supply of water. The slaughter-house is not usually visited at times of slaughtering, but it happened that I was present on one such occasion in the course of the year. There are no arrangements in the district for the inspection of meat, nor is there an Inspector with a special certificate in meat inspection.

Bye-laws with respect to Slaughter-houses are in force in this district and were adopted in 1894.

OFFENSIVE TRADES.

Certain offensive trades are specially mentioned in the Public Health Act of 1875, and model bye-laws of the Local Government Board specify certain others. These include such trades as that of blood boiler, bone-boiler, tanner and glue-maker, none of which occur in the district. As to what will constitute "a noxious or offensive trade" other than those specified, it is held that the business, in addition to being proved noxious, must be *ejusdem generis* with those specified and deal with animal matter in some form.

There were complaints in the beginning of the year about smells arising from a fried fish shop which had been recently opened in the district. This is commonly known as a trade nuisance. The nuisance was abated by dripping being used instead of oil, by the erection of a large deep hood to collect the effluvia arising from the frying. A gas jet was provided at the mouth of the

shaft leading from the hood to the chimney to promote a draught. There was also a side exit constructed from the chimney into the open air. The depth of oil in the vessels in which the frying is done is about 12 inches. Since these measures have been taken the nuisance has considerably abated.

ICE CREAMS.

Owing to the mildness of the summer weather very few ice-cream sellers appeared in the district. No complaints were received. In order to protect the public (mostly children) against Infectious Disease contracted by consuming ice creams, Part V. of the County Council of Middlesex (General Powers) Act, 1906, which came into operation on November 5th, 1906, provides, among other things, that every itinerant vendor of ice creams shall exhibit in a legible manner on a conspicuous part of his barrow a notice stating the name and address of the person from whom he obtains his ice creams, and if the vendor is himself the manufacturer of such commodity, he shall in the same manner exhibit his own name and address. The barrows were frequently inspected by your Inspector and were found to be in order.

UNSOUND FOOD.

In July a man residing in Teddington arrived at Hampton Wick Railway Station and voluntarily surrendered eleven baskets of apricots, the majority of the apricots being rotten and unfit for human consumption. I gave him a certificate to that effect, and the fruit was destroyed.

HOUSE REFUSE COLLECTION AND DISPOSAL.

The dust and house refuse is collected weekly by a contractor appointed by the District Council. It is disposed of by removal to some land near the allotment, which is a fair distance from any dwelling-house. The

refuse is kept covered over as far as possible with soil. I may here add that during the house-to-house inspections, I found in many instances old brick dust-bins in use, and these were often found to be in a dilapidated condition. Such dust-bins should in future not be constructed. The galvanised iron receptacles are much more satisfactory, as they can be kept covered over, and the dust is more easily and efficiently dealt with by the dust collectors.

THE MORTUARY.

Prior to the year 1896 an old shed served as a mortuary, but in that year the present structure was built on the same site. When first erected it was one of the best in the county. It contains two large slate tables for corpses; water and gas are laid on, and the flushing arrangements are most satisfactory. The Mortuary remained in the same condition up till this year, when I informed your Council that it would be a very great boon to Medical Practitioners using it to have a stove placed there, and that this would also serve to heat water. I also pointed out that a set of Weights and Scales and a writing desk would be of great use. Your Council generously acceded to my request, and the following articles were provided:—

Gas Stove.

Head Block.

Set of Weights and Scales.

Writing Desk.

Bunsen Burner.

Kettle.

Urine Glass.

Two Cans.

Shelf for Bunsen Burner and Urine Testing.

Three enamelled iron basins labelled H.W.D.C.

A set of bottles labelled and containing the following chemicals :—

Acetic Acid.
 Fehling's Solution No. 1.
 Fehling's Solution No. 2.
 Nitric Acid
 Liq. Potassæ.
 Litmus Paper.

I am sure the provision of these articles will be greatly appreciated by any Medical Practitioners using the Mortuary.

FACTORY AND WORKSHOP ACT.

There are six factories in the district, viz.:—

Brass Foundries	2
Motor Works	1
Polishing Cloth Works	1
Metal Engraving Works	1
Safety Non-Explosive Reservoir Works	1
	—
	6
	—

The last two have now amalgamated and occupy one set of premises.

The Workshops in the district include the following :—

Bakehouses	2
Boat-building Yards	2
Dressmakers and Milliners	3
Upholsterers	2
	—
	9
	—

The Work-places in the district include the following :—

Restaurants	...	...	...	...	9
Coffee Shops	...	...	...	...	1
Timber Yards	...	...	...	...	1
					—
					11
					—

There is one Laundry in the district which is treated as a Workshop. Although not coming under the definition of Factory and Workshop, under Section 103 of the Act it is so far as sanitation and means of escape from fire is concerned. Laundries worked by members of the family by themselves or with the assistance of not more than two persons from outside, are excluded from the Act. There are a few such in the district.

A letter was received from His Majesty's Inspector of Factories early in March wishing to know whether the Standards laid down in the Order of the Secretary of State made in pursuance of Section 9 of the Factory and Workshop Act, 1901, were enforced by the Officers of your Council, and, if not, in what respect the local requirements differed from those standards as regards :—

- (a) Number of Conveniences—Male.
Number of Conveniences—Female.
- (b) Intervening ventilated space between Work-room and Convenience.
- (c) Cleanliness and lighting of Convenience.
- (d) Partitions to secure privacy, and doors with internal fittings for females.
- (e) Accessibility of Conveniences.
- (f) Separate accommodation for males and females.
- (g) Separate approaches to Conveniences for males and females.

After the receipt of this letter, I made, in company with your Sanitary Inspector, a careful examination of the Factories and Workshops in the district. The result was as follows:—

- (a) Number of Conveniences.—These were in all cases sufficient.
- (b) Intervening ventilated space between work-room and convenience.—In one case there was none, but no nuisance was caused.
- (c) The conveniences were clean; in one case the lighting was deficient.
- (d) Partitions for privacy were wanting in one case. Doors with internal fittings for females were invariably present.
- (e) The conveniences were in every case found to be easily accessible.
- (f) In one case the males and the one female employed used the same convenience. I pointed out the matter, and I afterwards heard that the female was no longer employed.
- (g) Separate approaches were found to be present in every case for males and females.

In no case had any nuisance arisen by reason of the fact that the arrangements were not in every respect up to the Standard indicated in the Order. I laid the facts before your Council, and they decided to enforce the Standards with respect to any new Factories and Workshops which might in future be started in the district, and, as far as practicable, with regard to existing Factories and Workshops. I communicated this decision to His Majesty's Inspector of Factories. No case of overcrowding was met with. Ventilation and Drainage were in all cases satisfactory.

BAKEHOUSES.

There are two in the district, and in both cases the special sanitary regulations were complied with. They were cleanly and well-ventilated.

HOME WORK.

Three lists were received during the year: one from one borough, and two from another borough. All referred to one particular Out-worker residing in this district. His premises were inspected and were found to be in good condition.

OUT-WORKERS.

One notice containing the name of one Out-worker was received. The Medical Officer of Health of the District in which the Out-worker resided was notified, and I requested him to let me know should any case of Infectious Disease occur at that address.

ROADS.

The Upper Teddington Road, the Hampton Court Road, and Sandy Lane have been repaired during the course of the year. That portion of the Lower Teddington Road adjacent to the High Street is not in good repair, but I understand this is shortly to be taken in hand. The rest of the roads are in good repair.

ADOPTIVE ACTS AND BYE-LAWS.

The following Adoptive Acts are in force in this district:—

Public Health Acts Amendment Act, 1890, Part III.
 Infectious Disease (Prevention) Act, 1890.
 Housing of the Working Classes Act, 1890, Part III.
 Public Health Acts Amendment Act, 1907, Parts
 II., III., IV., V., VII. (Section 81 (parts) and
 86), VIII., and IX.

In the following table are given the Bye-laws, with dates, which are in force in this district:—

1894. With respect to Slaughter Houses.

1894. Prevention of Nuisances arising from:—

a Snow, Filth, Dust, Ashes and Rubbish.

b The keeping of Animals on any premises so as to be injurious to health.

1901. In pursuance of Part II. of Public Health Acts Amendment Act, 1890 (Posts, Wires, Tubes, etc., in Public Streets).

1905. With respect to New Streets and Buildings.

1906. Common Lodging Houses.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

The Medical Inspection of School Children in this district is provided for by the Middlesex County Council, and they have appointed Dr. Young, who is the County Medical Officer of Health, School Medical Officer. The work is carried out under his supervision by two assistant School Medical Officers.

In order to minimise the spread of infectious disease among school children, the Local Government Board, in co-operation with the Board of Education, have recently issued a memorandum on “Closure and Exclusion from School.” The memorandum recommends that in order to ensure prompt and co-ordinated action on the part of medical officers of health and school medical officers, there shall be—

(*a*) Notification from medical officers of health to the school medical officer and to school teachers.

(*b*) Notification from school officers to medical officers of health and the school medical officer.

The former refers for the most part to notifiable infectious disease, the latter to diseases usually not notifiable, and to children absent owing to illness of a suspicious character.

The School Medical Officer communicated with me and has recommended that forms of exclusion should be prepared.

The proposed procedure would then be as follows:—

(1) The medical officer of health receives information—

(a) By notification from a medical practitioner,

(b) From a teacher or attendance officer.
of the occurrence of infectious disease, or of a scholar absent owing to illness which is not notifiable or which is of a suspicious nature.

(2) The medical officer of health investigates at the home and at the school.

(3) The medical officer recommends teacher as to necessary exclusions.

(4) The medical officer of health acquaints school medical officer by sending on prepared forms the exclusions for “formal authorisation.”

(5) The medical officer of health and school medical officer jointly conduct inquiries at school when necessary.

(6) School medical officer approves exclusions, and forwards certificates to Local Education Authority.

(7) Local Education Authority informs Managers.

If these recommendations be carried out, some effect should be produced in preventing the spread of infectious disease. There are no special arrangements in force in

the district for the treatment of school children whose health is found to be defective. How this should be carried out is a subject about which there is much difference of opinion, and it is engaging the attention of the medical profession at the present time.

There are two schools in the district with three departments. The sanitary arrangements were inspected and were found to be in good condition. The Infants School was closed early in the year on account of the measles epidemic. The school rooms were disinfected at the time of that epidemic, and also on two occasions during the Scarlet Fever outbreak in the autumn.

LEGISLATION.

The Housing, Town Planning, etc., Act, 1909, comes into force this year. Among other things it deals with facilities for Acquisition of Lands, with powers of enforcing Execution of the Housing Acts, with Amendment of Procedure for Closing Orders and Demolition Orders, with Town Planning, and with County Medical Officers.

Under the heading Midwives Act, I have already mentioned that Section 1, Sub-section (2) of the Midwives Act, 1902, comes into force on the first day of April, 1910.

In conclusion, I should like to express my thanks to the Chairman and Council for the very kind way in which they have considered the various suggestions I have made during the year, and also I must thank the Officers of your Council for the very efficient services they have rendered me in carrying out the duties of my office.

I am, Mr. Chairman and Gentlemen,
Your obedient servant,

H. A. GÜNTHER,
M.B.Lond., M.R.C.S.Eng., L.R.C.P.Lond.,
Medical Officer of Health.

INQUESTS, 1909.

<i>Date.</i>	<i>Sex.</i>	<i>Age.</i>	<i>Verdict.</i>
March 22nd ...	M. ...	77 ...	"Suicide" by taking Cyanide of Potassium Poison, whilst temporarily of unsound mind.
June 6th ...	M. ...	34 ...	Accidentally drowned by falling from a skiff into the river.
August 13th ...	M. ...	10 ...	Accidental drowning.
August 29th ...	M. ...	18 ...	Suicide by drowning, while of unsound mind.
Sept. 20th ...	M. ...	70 ...	Syncope from hæmorrhage into the brain. P.M.

DISTRICT OF HAMPTON WICK, COUNTY OF MIDDLESEX.—SANITARY WORK, 1909.

i.

Inspections.*					Notices.				Dwelling Houses.					Houses let in Lodgings. (Tenement Houses).		Common Lodging Houses.			Canal Boats used as Dwellings.		Movable Dwellings, Caravans, Tents, &c.		
(1) Number of Premises Inspected on Complaint.	(2) Number of Premises Inspected in connection with Infectious Diseases.	(3) Number of Premises under Periodical Inspection.	(4) Houses Inspected from House-to-House.	(5) Total Number of Inspections and Re-inspections made.	Cautionary or Intimation Notices Given.	Statutory Orders Issued.	Summonses Served.	Convictions Obtained.	Houses, Premises, &c., Cleansed, Repaired, &c.	Closed as Unfit for Habitation (a) <i>As result of action under H. W. C. Acts.</i> (b) <i>Otherwise.</i>	Re-opened after Repairs, Alterations, &c.	Demolished.	Illegal Underground Dwellings Vacated.	Number Registered under Bye-Laws.	Number of Contraventions.	Number Registered under Bye-Laws.	Number of Inspections made.	Number of Contraventions.	Number registered under the Acts.	Number of Contraventions of Regulations.	Number Observed during the Year.	Number of Nuisances therefrom Abated.	Number Removed from District.
1	26	28	300	355	3	..	..	..	4	0	0	0	0	0	0	1	2	0	..	..	9	..	9

* N.B.—(3) Includes all classes of premises under periodical supervision, such as Cowsheds, Dairies, Slaughterhouses, Workshops and Workplaces, &c.
 (5) Includes all visits and re-visits made by Sanitary Inspectors in connection with 1—4.

ii.

DISTRICT OF HAMPTON WICK, COUNTY OF MIDDLESEX.—SANITARY WORK, 1909.

Bakehouses.		Slaughter-houses.			Cow-sheds.			Dairies and Milkshops.			Unsound Food.			Adulterated Food.		Offensive Trades.			Water Supply and Water Service.									
Number in District.	Contraventions of Factory Acts.	Number on Register.	Number of Inspections made and frequency of inspection.	Contraventions of Bye-Laws.	Number on Register.	Number of Inspections made and frequency of inspection.	Contraventions of Regulations.	Number of Milch Cows in District.	Number on Register.	Number of Inspections made and frequency of inspection.	Contraventions of Regulations.	(a) Animals seized (b) Articles or Parcels seized.	Condemned by Magistrate (a & b).	Articles or Parcels surrendered.	Samples taken (if any) by the District Local Authority.	Found adulterated.	Number of Premises in District.	Number of Inspections made.	Contraventions of Bye-Laws.	New Sunk.	Cleansed, Repaired, &c.	Closed as Polluted.	Percentage of Houses supplied from Public Water Service.	New Provided.	Cleansed, Repaired. Covered, &c.	Draw-Taps placed on Mains.	Percentage of Houses supplied on Constant System.	Number of Samples obtained for analysis, (a) from Local Wells (b) from Public Supply.
2	0	1	2 twice yearly	0	1	2 twice yearly	0	12	3	6 twice yearly	0	a 0 b 0	a 0 b 0	11 boxes of apricots.	:	:	0	:	:	0	0	0	95	0	2	0	95	a 1 b 0

DISTRICT OF HAMPTON WICK, COUNTY OF MIDDLESEX.—SANITARY WORK, 1909.

iii.

Drainage and Sewerage of existing Buildings.													Disinfection.		Dust.		Sundry Nuisances Abated.							Remarks as to any other matters, or in explanation of previous columns.						
Water Closets.		Percentage of Houses provided with Water Closets.	Drains.						Cesspools.		Percentage of Houses Draining into Sewers.																			
Number of Water Closets substituted for Dry Receptacles.	Repaired, Supplied with Water, or otherwise Improved.			Examined, Tested, Exposed, &c.	Unstopped, Repaired, Trapped, &c.	Waste Pipes, Rain Water Pipes Disconnected, Repaired, &c.	New Soil Pipes or Ventilating Shafts fixed.	Existing Soil Pipes or Ventilating Shafts repaired.	Disconnecting Traps or Chambers inserted.	Reconstructed.		Rendered Impervious, Empty, Cleansed, &c.	Abolished, and Drain connected to Sewer.		Rooms Disinfected (a) Ordinary infectious diseases, (b) Phthisis.	Rooms Stripped and Cleansed.	Articles Disinfected or Destroyed, (a) Ordinary infectious disease, (b) Phthisis.	New Bins provided.	How frequently is dust removed from each house ?	Number of Complaints of Non-Removal received.	Method of Disposal (a) Destructor, (b) by Tipping, (c) Other, state method.	Overcrowding.	Smoke.	Accumulations of Refuse.	Foul Ditches, Ponds, &c., and Stagnant Water.	Foul Pigs and other Animals.	Dampness.	Yards repaved or repaired.	Other Nuisances.	
0	12	100	2	1	3	0	0	0	1	0	0	98.5	a 18 b 1	0	a 1 b 1	1	Weekly.	6	Tipping.	0	0	1	0	0	2	0	0			

TABLE I.—For the Whole District of Hampton Wick.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT.	Deaths of Non- residents registered in Public Institu- tions in the District.	Deaths of Residents registered in Public Institu- tions beyond the District.	NETT. DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number.	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number.	Rate per 1000 Births registered	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1899	2,400	49	20.40	1	20.00	32	13.33	...	4	...	28	11.67
1900	2,400	55	22.92	7	127.00	26	10.83	...	2	...	24	10.00
1901	2,606	44	16.90	5	113.00	38	14.58	...	5	3	36	13.81
1902	2,606	45	17.26	5	111.00	30	11.51	...	1	1	30	11.51
1903	2,606	46	17.65	1	21.74	16	6.14	...	3	3	16	6.14
1904	2,606	48	18.42	5	104.17	27	10.36	...	1	4	30	11.51
1905	2,606	37	14.20	4	108 11	20	7.67	...	2	4	22	8.44
1906	2,630	40	15.21	1	25.00	21	7.98	...	2	8	27	10.27
1907	2,630	38	14.45	7	184.21	30	11.41	...	3	6	33	12.55
1908	2,665	40	15.01	6	150.00	30	11.26	...	3	9	36	13.51
Averages for years 1899- 1908	2,576	44	17.24	4.2	96.42	27	10.51	...	2.6	5	28	10.94
1909	2,650	47	17.74	1	21.28	32	12.08	...	4	7	35	13.21

* Rates in columns 4, 8 and 13 calculated per 1,000 of estimated population.
Area of District in acres (exclusive of area covered by water), 1,235.
Total population at all ages, 2606.
Number of Inhabited Houses, 520.
Average number of persons per house, 5.
Census 1901.

<p>I.</p> <p>Institutions within the District receiving sick and infirm persons from outside the District.</p>	<p>II.</p> <p>Institutions outside the District receiving sick and infirm persons from the District.</p>	<p>III.</p> <p>Other Institutions, the deaths in which have been distributed among the several localities in the District.</p>
	<p>Teddington and Hampton Wick Cottage Hospital.</p> <p>Isolation Hospital, Hampton.</p> <p>Kingston Union Infirmary.</p>	

Is the Union Workhouse within the District? No.

TABLE III.—Cases of Infectious Disease Notified during the Year 1909.
Hampton Wick District.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							Total Cases Notified in Each Locality				No. of Cases Removed to Hospital from Each Locality.				Total cases Removed to Hospital.
	At all Ages.	At Ages—Years.					Hampton Isolation Hospital.	London Fever Hospital.	Kingston Union Infirmary.	Total cases Removed to Hospital.						
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.					65 and upwards.					
Small Pox ...																
Cholera ...																
Diphtheria (includ- ing Membranous Croup)	2		2													
Erysipelas ...	4				1	1	2									
Scarlet Fever ...	26		5	16	4	1					2	3			5	
Typhus Fever ..																
Enteric Fever ..																
Relapsing Fever ...																
Continued Fever...																
Puerperal Fever ...																
Plague ...														3		
Pulmonary Tuber- culosis	3					3									3	
Totals ...	35		7	16	5	5	2				2	3	3		8	

Isolation Hospital, Hampton. Total available Beds 4. Number of Diseases that can be concurrently treated 2.

TABLE IV.

Causes of, and Ages at, Death during Year 1909.

CAUSES OF DEATH.	DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING IN OR BEYOND THE DISTRICT.						DEATHS IN LOCALITIES (AT ALL AGES).			DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.
	All ages.	Under 1.	1 & under 5	5 & under 15.	15 & under 25.	25 & under 65.	65 & upwards.			
Small-pox										
Measles	2		2							
Scarlet fever										
Whooping-cough...										
Diphtheria (includ- ing membranous croup)										
Croup										
Fever:—										
Typhus										
Enteric										
Other continued										
Epidemic influenza										
Cholera										
Plague										
Diarrhœa										
Enteritis										
Gastritis										
Puerperal fever ...										
Erysipelas... ..										
Phthisis (Pulmonary Tuberculosis) ...										
Other tuberculous diseases	2		1			1				
Cancer, malignant disease	5					4	1			
Bronchitis... ..	2						2			
Pneumonia	1						1			
Pleurisy	1						1			
Other diseases of res- piratory organs...										
Alcoholism }										
Cirrhosis of liver }										
Venereal diseases...										
Premature birth ...	1	1								
Diseases & accidents of parturition ...										
Heart diseases ...	4					2	2			
Accidents										
Suicides	1						1			
All other causes ...	16		1	2		6	7			
All causes	35	1	4	2		13	15			

TABLE V.—Hampton Wick District.

Infantile Mortality during the Year 1909. Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes { Certified ...	1				1												1
Uncertified ...																	
<i>Common Infectious Diseases:</i>																	
Small-pox ...																	
Chicken-pox ...																	
Measles ...																	
Scarlet Fever ...																	
Diphtheria ...																	
Whooping Cough ...																	
<i>Diarrhœal Diseases:</i>																	
Diarrhœa, all forms ...																	
Enteritis, Muco-enteritis {																	
Gastro-enteritis }																	
Gastritis, Gastro-intestinal Catarrh }																	
<i>Wasting Diseases:</i>																	
Premature Birth ...	1				1												1
Congenital Defects ...																	
Injury at Birth ...																	
Want of Breast Milk, {																	
Starvation }																	
Atrophy, Debility, {																	
Marasmus }																	
<i>Tuberculous Diseases:</i>																	
Tuberculous Meningitis ...																	
Tuberculous Peritonitis: {																	
Tabes Mesenterica }																	
Other Tuberculous Diseases																	
<i>Other Causes:</i>																	
Erysipelas ...																	
Syphilis ...																	
Rickets ...																	
Meningitis (not Tuberculous)																	
Convulsions ...																	
Bronchitis ...																	
Laryngitis ...																	
Pneumonia ...																	
Suffocation, overlying																	
Other Causes ...																	
	1				1												1

District of Hampton Wick.

...

Population, estimated to middle of 1909, 2,650.

Births in the year { Legitimate, 44.
 { Illegitimate, 3.

Deaths in the year of { Legitimate Infants, 1
 { Illegitimate ,, 0

Deaths from all Causes at all Ages, 35.

FACTORIES, WORKSHOPS, LAUNDRIES, WORK- PLACES AND HOMEWORK.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors
of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	12		
Workshops (Including Workshop Laundries)	20		
Workplaces	22		
Total	54		

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of Cleanliness ...				
Want of Ventilation ...				
Overcrowding				
Want of drainage of floors...				
Other Nuisances				
Sanitary accommodation not separate for sexes	1	1		
Breach of special sanitary re- quirements for bakehouses (ss. 97 to 100).				
Total	1	1		

* Including those specified in Sections 2, 3, 7, and 8, of the
Factory Act remediable under the Public Health Acts.

3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.					OUTWORK IN UNWHOLE-SOME PREMISES, SECTION 108.		
	Lists received from Employers.		Numbers of Addresses of Out-workers received from other Councils.	Numbers of Addresses of Out-workers forwarded to other Councils.	Number of Inspections of Out-workers' premises.	Instances.	Notices served.	Prosecutions.
	Twice in the year.	Once in the year.						
	Lists.	Out-workers.	Lists.	Out-workers.				
Wearing Apparel—								
(1) making, &c. ...			1	1	2			
(2) cleaning and washing ...								
Total ...			1	1	2			

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the Year.						Number.
Important classes of work-shops, such as workshop bakehouses, may be enumerated here.	Bakehouses	...	...	...	...	2
	Boat Building Yards	...	...	...	...	2
	Dressmakers and Milliners	...	...	...	...	3
	Upholsterers	...	...	...	...	2
Total number of workshops on Register						9

5.—OTHER MATTERS.

Class.						Number.
Matters notified to H.M. Inspectors of Factorics :—						
Failure to affix Abstract of the Factory and Workshop Act (S. 133)						
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)						
Notified by H.M. Inspector						
Reports (of action taken) sent to H.M. Inspectors.						Nil.
Other						
Underground Bakehouses (S. 101) :—						
Certificates granted during the year						
In use at the end of the year						

HANDSWORTH
URBAN DISTRICT.

REPORT

ON THE

Sanitary Condition of the District

FOR THE

Year ended December 31st, 1909,

BY

WILLIAM SISAM, M.D., B.Sc., D.P.H.,

Medical Officer of Health.

BIRMINGHAM :

ALLDAY LTD., PRINTERS, 128-130, EDMUND STREET.

MEMBERS OF THE HEALTH COMMITTEE.

Councillor W. C. CHANNING, Chairman.

„ EDWARD ASTON.

„ T. HENRY BERRY.

„ A. T. HOLDSWORTH, M.D.

„ W. H. NICKOLDS.

„ DAVID ROSE.

„ THOMAS SILVER.

„ F. BAILDON WRIGHT.

HEALTH OFFICIALS.

Medical Officer of Health—

WILLIAM SISAM, M.D., B.Sc., D.P.H.

Inspector of Nuisances—

ALBERT HODGES, Assoc. San. Inst.

Assistant Inspector—

ARTHUR J. GRAY, Certif. San. Inst.

Health Visitor—

GEORGINA S. THOMPSON, Assoc. San. Inst.

Clerks—

FRANK W. ASMAN.

PERCY JARRETT.

Superintendent of Cleansing Department—

C. H. WHITWORTH.

Clerk of Cleansing Department—

WALTER OSMAN.

STATISTICAL SUMMARY, 1909.

Area	3,667 Acres.
Population	71,935.
Birth-Rate	20·1.
Crude Death-Rate	8·9.
Recorded Death-Rate	10·2.
Infantile Mortality	83·.
Zymotic Death-Rate	1·05.
Tuberculosis (all forms) Death-Rate	0·93.
Phthisis Death-Rate	0·58.

PUBLIC HEALTH ACTS ADOPTED IN THE DISTRICT:—

The Infectious Diseases Prevention Act, 1890.

Parts 1 and 5 Public Health Acts Amendment Act, 1890.

Notification of Births Act, 1907.

Public Health Acts Amendment Act, 1907, Parts 1 to 6,
excepting Sections 18, 19, 21, 28, 48, 67.

HEALTH DEPARTMENT,
COUNCIL HOUSE,
HANDSWORTH.

TO THE
URBAN DISTRICT COUNCIL OF HANDSWORTH
IN THE COUNTY OF STAFFORD.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to present to you my Report upon the Sanitary Condition of the District during the year 1909.

The most noteworthy statistical features are, in brief, the fall in the birth-rate, the satisfactory general death-rate which only exceeds by a small fraction the lowest recorded in the District and the equally satisfactory infantile mortality figure. The Zymotic death-rate, although somewhat higher than that of last year, is well below the average of the preceding ten years in spite of a severe epidemic of Measles and unusual prevalence of Scarlet Fever and Diphtheria.

During the year the Public Health Acts Amendment Act, 1907, with the omission of a few clauses, was adopted in the District. This Act facilitates the work of the Health Department in many directions.

The following appear to me to be the most important sanitary improvements required in the District:—

The provision of an Isolation Hospital: This has been urged *ad nauseam* upon the Council in previous reports, and it is sufficient to mention here that the necessity for such provision increases every year with the increase of the artisan population. It is gratifying to be able to note that some little progress has recently been made, your Health Committee having caused to be prepared plans and estimates which are now receiving their consideration.

The more frequent removal of domestic refuse: A weekly collection for the whole District is highly desirable, more especially in the summer months when decaying refuse is most liable to be injurious to health. The weekly collection which was instituted last summer in Murdock Ward appeared to have some influence in reducing Diarrhoeal mortality (see p. 18), and it was certainly appreciated by the inhabitants of the Ward, while the extra cost entailed was not great.

I desire to record my appreciation of the valuable support of the Chairman and Members of the Health Committee and also of the loyal co-operation of the Chief Sanitary Inspector and the other members of the Sanitary staff.

I am,

Mr. Chairman and Gentlemen,

Your obedient Servant,

W. SISAM.

ANNUAL REPORT

*of the Medical Officer of Health to the Urban District Council
of Handsworth, Staffordshire, for the year 1909.*

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

The area of Handsworth is 3,667 acres according to the Ordnance Survey. From a health point of view its situation is an unusually good one, its height above the sea level varying from 570 feet (Holyhead Road) to 300 feet (Witton Road). Its subsoil consists mainly of sand and gravel.

Handsworth is bounded on the North by the Urban District of Perry Barr, on the South by the City of Birmingham, the County Borough of Smethwick and the Borough of Aston Manor, on the East by the Urban District of Erdington and on the West by the County Boroughs of West Bromwich and Smethwick.

The District is mainly residential and contains comparatively few manufactories within its borders, though many Handsworth residents are employed in large works situated in the immediately adjoining portions of Smethwick and Aston and in the Jewellery Quarter of Birmingham which approaches the southern boundary of Handsworth.

According to the Census of 1901, the chief occupations of the inhabitants come under the headings of "Metal and Machinery," "Manufacture of Jewellery" and "Commercial occupations."

The following particulars of rateable value of the dwelling houses in the District, as shown by the rate books in December, 1909, will give some idea of the social status of the population :—

Rateable Value.						No. of Houses.
£10 and under	..	...	...	...	...	4,399
Over £10 and up to and including £12	...	...	...	...	...	3,295
Over £12	..	..	..	£20	...	5,224
Over £20	...	...	...	...	...	3,170

VITAL STATISTICS.

I.—POPULATION.

The population at the middle of the year is estimated to have been 71,935, giving a density of population of 19·61 per acre. The rateable value of the District in April, 1909, was £295,978 18s.

The rapidity with which the District has grown is shown by the following figures :—

Census 1871 ...	Pop.	14,947 ...	Houses	2,790 ...	Persons per house	5·36
„ 1881 ...	„	22,896 ...	„	4,801 ...	„	4·77
„ 1891 ...	„	32,756 ...	„	6,771 ...	„	4·837
„ 1901 ...	„	52,921 ...	„	11,060 ...	„	4·785
Esti- mated 1909 ...	„	71,935 ...	„	16,166 ...		

It was estimated that 1,119 houses were void at the middle of the year.

The population in the several wards was assumed to be as follows :—

	Population.	Occupied Houses.	Void.	Acreage.
Birchfield	16,777 ...	3,518 ...	289 ...	1,142
Heathfield	9,926 ...	2,104 ...	101 ...	230
Murdock	13,014 ...	2,655 ...	226 ...	324
Sandwell	18,318 ...	3,877 ...	320 ...	1,568
Soho	13,900 ...	2,893 ...	183 ...	403
	<u>71,935</u>	<u>15,047</u>	<u>1,119</u>	<u>3,667</u>

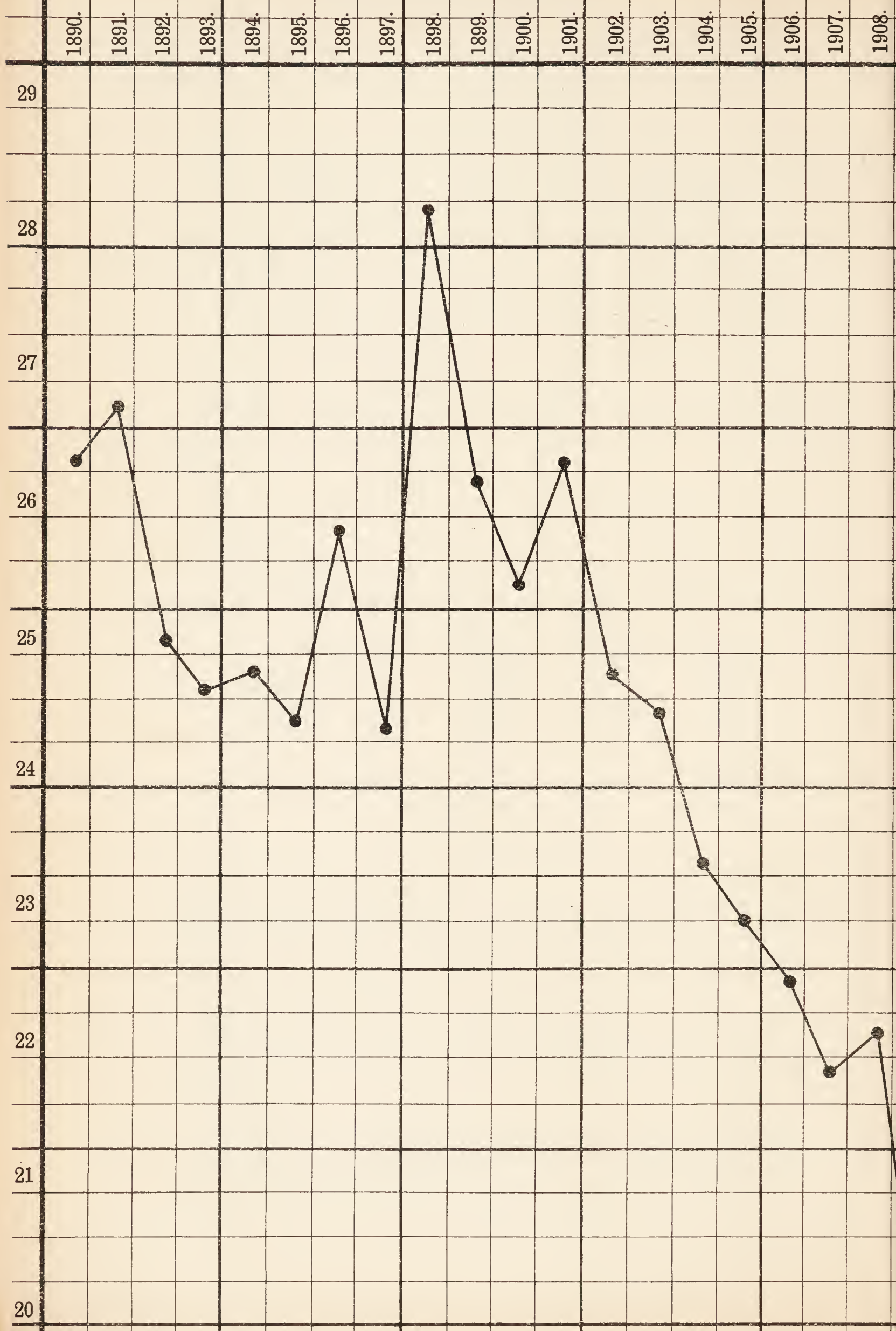
II.—BIRTHS.

One thousand four hundred and forty-six births were registered in the District during the year—718 males and 728 females. The birth-rate per 1,000 for the year was 20·1. The rate last year was 22·2. The birth-rate in England and Wales in 1909 was 25·6 while in the 76 large towns it was 25·7.

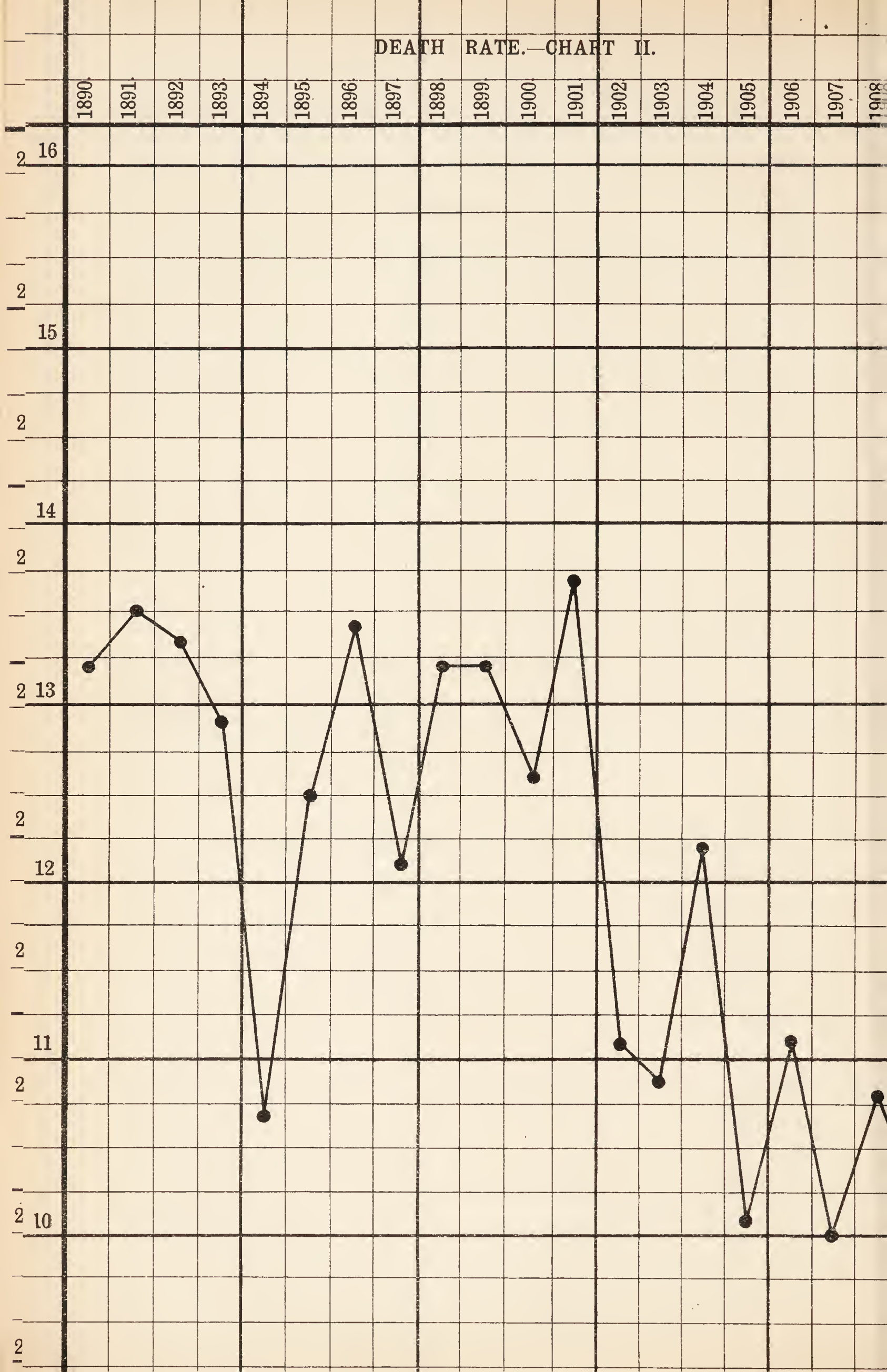
Reference to Chart I. shows that, excepting for a slight check in 1908, the birth-rate in this District has steadily declined since 1901.

The fall in the birth-rate, however, is of social rather than of sanitary interest excepting in so far as it provides an incentive to make further efforts to reduce infantile mortality.

BIRTH RATE.—CHART I.



DEATH RATE.—CHART II.



The births were distributed in the various wards as follows:—Birchfield 339, Heathfield 132, Murdock 333, Sandwell 420, Soho 222. The birth-rates per thousand of the estimated population of the several wards were, therefore:—Birchfield 20·2, Heathfield 13·2, Murdock 25·5, Sandwell 22·2, Soho 15·9. Compared with last year the number of births in Sandwell and Soho wards have increased, while in Birchfield, Heathfield and Murdock wards there has been a decrease.

III.—DEATHS.

Seven hundred and thirty-seven deaths of residents occurred during the year—330 males and 407 females. Of these 649 were registered in the District, 28 occurred in the West Bromwich Union Workhouse, 7 in the County Lunatic Asylum at Burntwood and 4 in the West Bromwich Infectious Hospital. Forty-six deaths occurred at hospitals in Birmingham, viz.:—23 in the General Hospital, 8 in the Queen's Hospital, 7 in the Children's Hospital, 3 in a Private Hospital, 2 in the Ear and Throat Hospital, 2 in the City Hospital and 1 in the Homœopathic Hospital. One death from poisoning of a Handsworth resident occurred in Birmingham, 1 from suicide at Sutton Coldfield and 1 from drowning at Erdington. Coroners' inquests were held in 28 cases, *i.e.*, in 3·7 per cent. of the total number. The cause of death was not certified in 18 cases, *i.e.*, in 2·4 per cent. of the whole number.

The death-rate was 10·2. The death-rate was 10·8 in 1908, 10·0 in 1907, and 11·1 in 1906. The average death-rate in the years 1897-1906 was 12·0.

The death-rate in 1909 in England and Wales was 14·5. In England and Wales, excluding the 219 towns, it was also 14·5. In the 76 large English towns it was 14·7 and for the 143 smaller towns it was 13·9.

Although 10·2 represents a very satisfactory death-rate when compared with the average of the whole country, yet it must be remembered that Handsworth, in common with most large aggregations of population, contains an excess of young adults and an unduly small proportion of persons at the most

vulnerable ages, and therefore *ceteris paribus* should have a considerably lower death rate than the average.

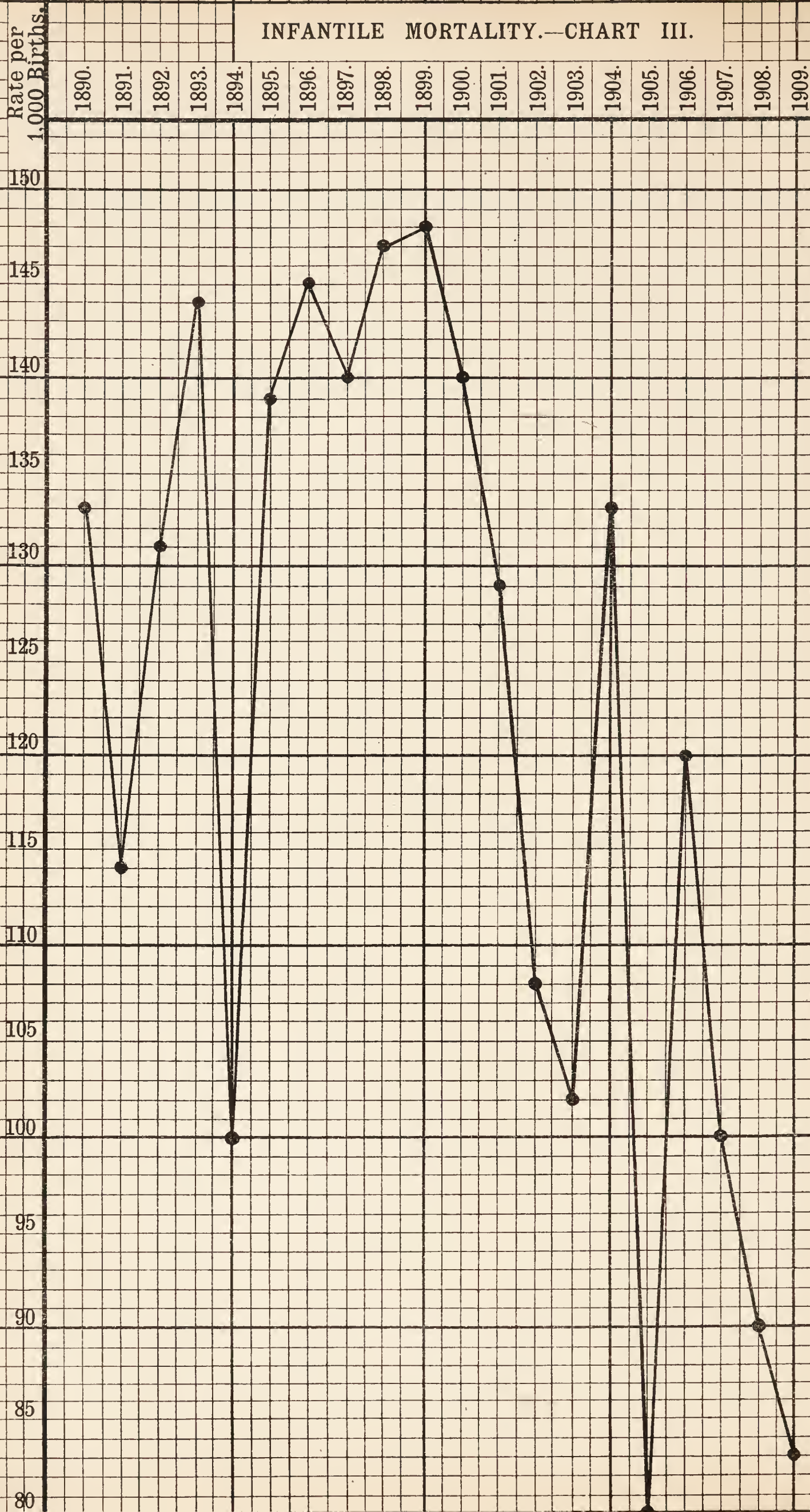
The advantage, so far as mortality is concerned, which any district enjoys over the country as a whole by reason of the special age and sex composition of its population, is capable of being expressed mathematically and an approximately accurate correction of the mortality rates can be made for purposes of comparison. On the basis of the Census of 1901, the Factor for Correction, as it is called, for this District is 1·1003, and if the death-rate be multiplied by this, the resultant figure represents the rate which would probably have been experienced had the age and sex composition been the same as that of the whole of England and Wales. When corrected in this manner, the death-rate of Handsworth for 1909 becomes increased to 11·2.

In Table A the birth-rate and death-rate for 1909 are compared with those of preceding years, while Charts 1 and 2 depict the fluctuations which the birth and death-rates have experienced since 1890.

TABLE A.

Years.	Population Yearly.	Births Yearly.	Birth-rate per 1,000 Yearly.	Deaths Yearly.	Death-rate per 1,000 Yearly.
10 Years 1871-80	18,722	611	32·7	280·5	15·2
10 Years 1881-90	27,610	175·4	28·2	359·5	13·2
10 Years 1891-1900	40,445	939·2	27·6	514·3	12·6
1901	53,000	1,403	26·4	724	13·7
1902	56,141	1,392	24·8	627	11·1
1903	59,000	1,451	24·6	642	10·9
1904	61,500	1,436	23·4	754	12·2
1905	65,249	1,483	23·0	661	10·13
1906	66,276	1,500	22·6	740	11·1
1907	69,122	1,516	21·9	693	10·0
1908	70,518	1,570	22·2	763	10·8
1909	71,935	1,446	20·1	737	10·2

INFANTILE MORTALITY.—CHART III.



IV.—AGES AT DEATH.

Infantile Mortality.—The number of deaths at ages under one year was 121, giving a mortality per 1,000 births registered during the year of 83. With the exception of 1905, when it was 80 per 1,000 births, this is the lowest rate recorded for the District. In 1908 it was 90, and 100 in 1907. The average infantile mortality in the years 1891–1900 was 135. The corresponding figures for previous years are given in Table B, and in graphic form on Chart 3.

The infantile death-rate in England and Wales in 1909 was 109. In England and Wales, less the 219 towns, the infantile death-rate was 98. In the 76 large English towns it was 118. In the 143 smaller towns it was 111.

The deaths of infants occurred in the several wards as follows:—Birchfield 29, Heathfield 13, Murdock 34, Sandwell 28, Soho 17.

TABLE B.

Years.	No. of Births Yearly.	Number of Deaths under one Year, Yearly.	Deaths per 1,000 Births Yearly.
10 Years 1871-80	611	73	119
10 Years 1881-90	775·4	94·1	120
10 Years 1891-1900	939·2	146·3	135
1901	1,403	183	129
1902	1,392	150	108
1903	1,451	148	102
1904	1,436	192	133
1905	1,483	119	80
1906	1,500	181	120
1907	1 516	153	100
1908	1,570	142	90
1909	1,446	121	83

Of the 121 infants who died, 40, or 33 per cent, died within a fortnight of birth, and 68, or 56 per cent., died before they reached 3 months old.

At ages below 5 there were 208 deaths, 28 per cent. of the whole number; whilst at ages above 65, there were 219 deaths, nearly 29 per cent of the whole; so that the deaths of children under 5 years and adults over 65 years account for nearly 58 per cent. of the total deaths.

V.—CAUSES OF DEATH.

Infantile Mortality, according to the Causes of Death.—The 121 deaths were due to the following causes:—

	Males.	Females.	Total 1909.	Total 1908.
1. <i>Diarrhœa</i> , including gastro-enteritis	11	6	17	21
2. <i>Diseases of Development</i> , premature birth, &c.	10	19	29	38
3. <i>Debility, Atrophy, Inanition</i>	5	10	15	17
4. <i>Diseases of Respiratory System</i>	12	11	23	18
5. <i>Epidemic Diseases</i> (other than <i>Diarrhœa</i>)	3	7	10	10
6. <i>Convulsions and Meningitis</i>	1	4	5	10
7. <i>Tubercular Diseases</i>	—	3	3	3
8. <i>Diseases of Digestive System</i> (other than Enteritis)	4	—	4	6
9. <i>Suffocated in bed</i>	—	—	—	3
10. Other causes	7	8	15	16
Totals ...	53	68	121	142

Further details will be found in Table V.

Although our infantile mortality is nearly 25 per cent. below that of England and Wales and compares favourably with that of many purely rural districts, consideration of the causes of death classified above shows that the irreducible minimum is far from being reached. At least 20 per cent. of the deaths would have been prevented had the infants been placed under perfect conditions of food and environment.

In common with most large towns, Handsworth has adopted special measures to preserve infant life. For many years the Registrar of Births has been supplied with leaflets on the care and feeding of infants and he has given copies to all persons registering births. There can be no doubt that these

leaflets have achieved their object in many instances ; but on the other hand it is known that they have frequently remained unread or at least unheeded by the class of mothers for whom they were chiefly designed. It is found by experience that printed matter of this kind receives very little attention from the working classes, possibly because it becomes confused with the advertising pamphlets which are now distributed so lavishly and in such great variety. For this reason printed instructions are supplemented or replaced by personal supervision and advice wherever practicable.

The Notification of Births Act, 1907, which was adopted in Handsworth in May, 1908, is of great value in enabling supervision to be exercised over infants during the earliest and most critical period of their existence.

The Act directs that the father of the child shall give notice of the birth in writing to the Medical Officer of Health of the district in which the child is born. This notice shall be given by posting a letter or postcard addressed to the Medical Officer of Health within thirty-six hours after the birth. In default of the father of the child doing this, the obligation falls upon any person in attendance upon the mother at the time of or within six hours after the birth.

The medical practitioner in attendance upon the case is included in the latter category, and it has been regarded as a hardship by most members of the profession that such an addition should have been made to the considerable volume of gratuitous work which they are called upon to perform. However, in spite of their sense of its injustice, the doctors practising in this District have rendered valuable assistance to the Health Department in securing observance of the Act.

The notification of births is in addition to and not in substitution for the registration of birth in the ordinary way. The births of still-born as well as of living children have to be notified to the Medical Officer of Health under this Act.

Since the adoption of the Act every effort, short of prosecution of defaulters, has been made to secure compliance with its requirements. All doctors, midwives and monthly nurses known to practice in the District have been supplied with stamped and addressed notification forms which reduce the labour of notifying to a minimum. The returns of births *registered* in the District have been regularly compared with the lists of those *notified*, and, in cases of omission to notify, letters of enquiry and reminder have been despatched to the persons in default. Up to the end of the year 94·1 per cent. of the live-births had been duly notified, a fairly satisfactory result for the second year's working of the Act ; and in addition 52 still-births, amounting to 3·6 per cent. of the total births, were reported. Still-births not being registrable, their notification cannot be checked by means of the Registrar's returns as in the case of live births ; but it is probable that the notification of a considerable proportion is omitted.

It may be of interest to record that 67·5 per cent. of the births notified during 1909 were attended by medical practitioners.

In May, 1909, Miss Thompson, who for about a year previously had voluntarily performed the duties of Health Visitor in the District, was officially appointed to the combined posts of Health Visitor and School Nurse. In the former capacity she visits, as soon after notification of birth has been received as practicable, all the homes in which births unattended by doctors take place, and gives such practical advice and assistance to the mothers as may be needful. Visits are paid also to the poorer homes in which the births have been medically attended, but not until the attendance of the doctor has ceased.

During the year a total of 1,609 visits were paid in respect of 593 infants.

The advice given was almost invariably appreciated and faithfully followed, and it is probable that the results are in some measure reflected in the satisfactory infantile mortality figure recorded.

Enquiry was made as to the mode of feeding of the infants who died during the year. In 34 instances death occurred within a few days of birth as a result of prematurity, congenital defect or injury at birth, and these were omitted from the enquiry, while in 7 cases the family had left the District and no information could be obtained.

Of the remaining 80 infants, 30, or 37·5 per cent., had been entirely breast fed, 24, or 30 per cent., had been partly breast and partly bottle fed, and 26, or 32·5 per cent., had been entirely bottle fed.

Epidemic Diseases.—The seven chief Epidemic diseases caused 76 deaths, giving an Epidemic death-rate of 1·05.

The Epidemic death-rate in 1909 in England and Wales was 1·12, in England and Wales (less the 219 towns) it was 0·80, in the 76 great towns it was 1·42, and for the 143 smaller towns it was 1·08.

Table C on page 41 compares the number of deaths from each of the seven chief Epidemic diseases with the deaths of previous years.

In the following table the death-rate of each of the foregoing Epidemic diseases is compared with those of former years.

TABLE D.

Diseases.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
Smallpox ...	·00	·11	·00	·14	·00	·00	·00	·00	·00	·00	·00	·00	·00	·00
Scarlatina ...	·57	·33	·09	·08	·10	·15	·14	·22	·08	·04	·07	·03	·14	·13
Measles ...	·11	·24	·18	·16	·21	·23	·18	·14	·05	·12	·04	·26	·01	·25
Typhoid Fever ...	·22	·11	·12	·08	·13	·13	·11	·02	·09	·03	·04	·06	·01	·04
Diphtheria ...	·14	·10	·15	·09	·19	·17	·14	·07	·23	·06	·03	·17	·16	·16
Whooping Cough	·27	·32	·33	·23	·27	·23	·28	·07	·36	·06	·46	·16	·27	·19
Diarrhoea ...	·66	·51	·44	·37	·88	·66	·07	·34	·50	·30	·78	·07	·24	·26

There has been no death in the District from **Smallpox** since 1894.

Scarlet Fever caused 10 deaths. In 1908 also there were 10 deaths.

SCARLET FEVER CASES.

Year.	Estimated Population.	No. of Cases notified.	No. admitted to Hospital.	No. of Deaths in Hospital.	No. of Cases treated at home.	Deaths among these.
1903	59,000	361	59	0	302	13
1904	61,500	256	114	1	142	4
1905	65,249	127	48	1	79	2
1906	66,276	234	73	3	161	2
1907	69,122	216	40	0	176	2
1908	70,518	420	95	3	325	7
1909	71,935	432	115	4	317	6

Measles caused 18 deaths as compared with 1 in 1908.

Whooping Cough by its complications was responsible for 14 deaths as against 19 last year.

Typhoid Fever caused 3 deaths this year as compared with 1 in 1908 and 4 in 1907.

Diphtheria caused 12 deaths as compared with 12 in 1908 and 11 in 1907.

Diarrhœa caused 19 deaths, made up as follows :—

Under 1 year	...	...	...	...	11
1 and under 5 years	...	...	...	...	3
5 and under 15 years	...	...	...	...	2
Over 65 years	...	...	...	...	3

To these should be added the 12 deaths from Enteritis, making a total under this head of 31. The deaths from Enteritis included cases at practically all the age periods.

Under the heading “Diarrhœa,” including “Enteritis,” “Gastro-Enteritis” and “Entero-Colitis,” as being one and the same disease, the deaths for each year and the death-rates are given below :

	Average 1893-1902	1903	1904	1905	1906	1907	1908	1909
Deaths ...	44	35	46	30	66	26	29	31
Death-rate...	1·02	0·6	0·74	0·46	0·99	0·37	0·41	0·43

The remarkable annual variations in the death-rate from Diarrhoeal diseases are chiefly to be accounted for by the variations in the summer and autumn climatic conditions, the highest mortality being experienced in hot and dry years.

It is generally held that the prevalence of these diseases bears some relationship also to the efficiency of the systems of sewage and refuse removal and to the cleanliness of dwellings, and for this reason Diarrhoeal Mortality is by many considered to be an index of the general sanitary condition of a district.

Although the proximate cause of that deadly form of the disease known as Epidemic or Summer Diarrhoea has not yet been identified with certainty, there is little doubt that it is bacterial in nature, and that it gains access to the body of its victims chiefly by means of food which it contaminates.

It is thought that the bacteria are conveyed to food in dust and also through the agency of the common house fly.

A mass of circumstantial evidence has gradually been accumulated against the latter, whose habit of feeding impartially on garbage and on human food had long brought it under suspicion. It is probable that measures directed towards the extermination of the fly or, short of this, its banishment from dwellings, would have a marked effect in reducing Diarrhoeal mortality.

The fly is most successfully attacked while in either the egg or the larval stage in its breeding places, which are principally manure heaps and the contents of privies and ashpits. The minimum period required for the complete development of the fly from the egg is eight days; therefore the systematic removal and destruction at shorter intervals than that period of the material in which the eggs are deposited are clearly indicated. In this connection, the institution of a weekly collection of domestic refuse in this District and the adoption of a bye-law compelling the weekly removal of stable manure and similar accumulations, as suggested in previous reports, are strongly recommended.

All food, especially milk, should be protected from the raids of winged pests, and it is highly important that food should also be kept in as cool a place as possible. Multiplication of disease-producing bacteria is greatly favoured by warmth, and an originally small degree of contamination (of milk for example) is liable to assume highly dangerous proportions after a few hours' exposure to summer temperature.

In regard to dust and its attendant evils, these would probably be mitigated by the application of tar-macadam (or by some similar process) to those roads which by reason of comparatively light traffic are most suitable for such treatment.

This process has been tried on several roads in the District and the results have been very satisfactory from the points of view of wear and tear and of immunity from dust.

It was found that during the years for which separate ward statistics were available, viz. 1901 to 1908, the Diarrhœal death-rate among infants was considerably heavier in the Murdock Ward than in any other, the figures being as follows :—

Ward.	No. of Infantile Deaths from Diarrhœa and Enteritis, 1901-1908.						Approximate percentage of total.
Birchfield	47	...	...	...	21·5
Heathfield	17	...	...	...	8·0
Murdock	87	...	...	...	40·0
Sandwell	45	...	...	...	20·5
Soho	22	...	...	...	10·0

The population of Murdock Ward during the same period was just under 20 per cent. of that of the whole district.

It was therefore decided in 1909 to devote special attention to this ward.

Domestic refuse was removed weekly during the summer months and very strict surveillance was exercised over all premises in the poorer streets with a view to securing a high standard of cleanliness in the houses as well as in courts and yards. The Health Visitor made daily enquiries for cases of Infantile Diarrhœa, and on such being found immediate medical attention was urged, while disinfectants were supplied and

instructions given to immerse all napkins soiled by the patient in disinfectant solution directly on removal.*

The mortality figures for 1909 are as follows :—

Ward.	No. of Infantile Deaths from Diarrhœa and Enteritis.					Approximate percentage of total.
Birchfield	8	...	...	47·0
Heathfield	—	—
Murdock	3	...	...	18·0
Sandwell	4	...	...	23·5
Soho	2	...	...	11·5

The actual number of deaths from Diarrhœal diseases in the Murdock Ward was the lowest recorded in any year, with the exception of 1902, when only 2 deaths occurred, while the proportion to the total Diarrhœal deaths was decidedly the lowest on record. While it would be unwise to draw deductions from one year's result and to attribute the improvement solely to the special measures taken, the result serves as an encouragement for their continuation and extension to other parts of the District in future.

Tuberculous Diseases.—Sixty-seven deaths were due to this class of disease, as compared with 66 in 1908, 58 in 1907 and 57 in 1906.

Forty-two of the deaths were due to Tuberculosis of the Lungs, or Phthisis.

The following table compares the death-rates from all forms of Tuberculosis and from Phthisis alone of the past ten years :—

		Death-rate per 1000 of the estimated population.					
		All forms of Tuberculosis.				Phthisis.	
1900	1·1	...	...	0·84
1901	1·1	..	...	0·90
1902	1·23	...	...	0·97
1903	1·24	...	...	0·86
1904	0·89	...	..	0·35
1905	0·89	...	...	0·67
1906	0·86	...	...	0·60
1907	0·84	...	..	0·49
1908	0·93	...	...	0·75
1909	0·93	...	...	0·58

* It was considered advisable to assume the infectivity of the fæces in Epidemic Diarrhœa, although such has never been conclusively proved.

For many years it has been the rule in this District, on receipt of notice from the Registrar of Deaths that a death from Tuberculous disease has taken place, to offer disinfection of the rooms, clothes and bedding used by the deceased person, and in a majority of cases the offer has been accepted.

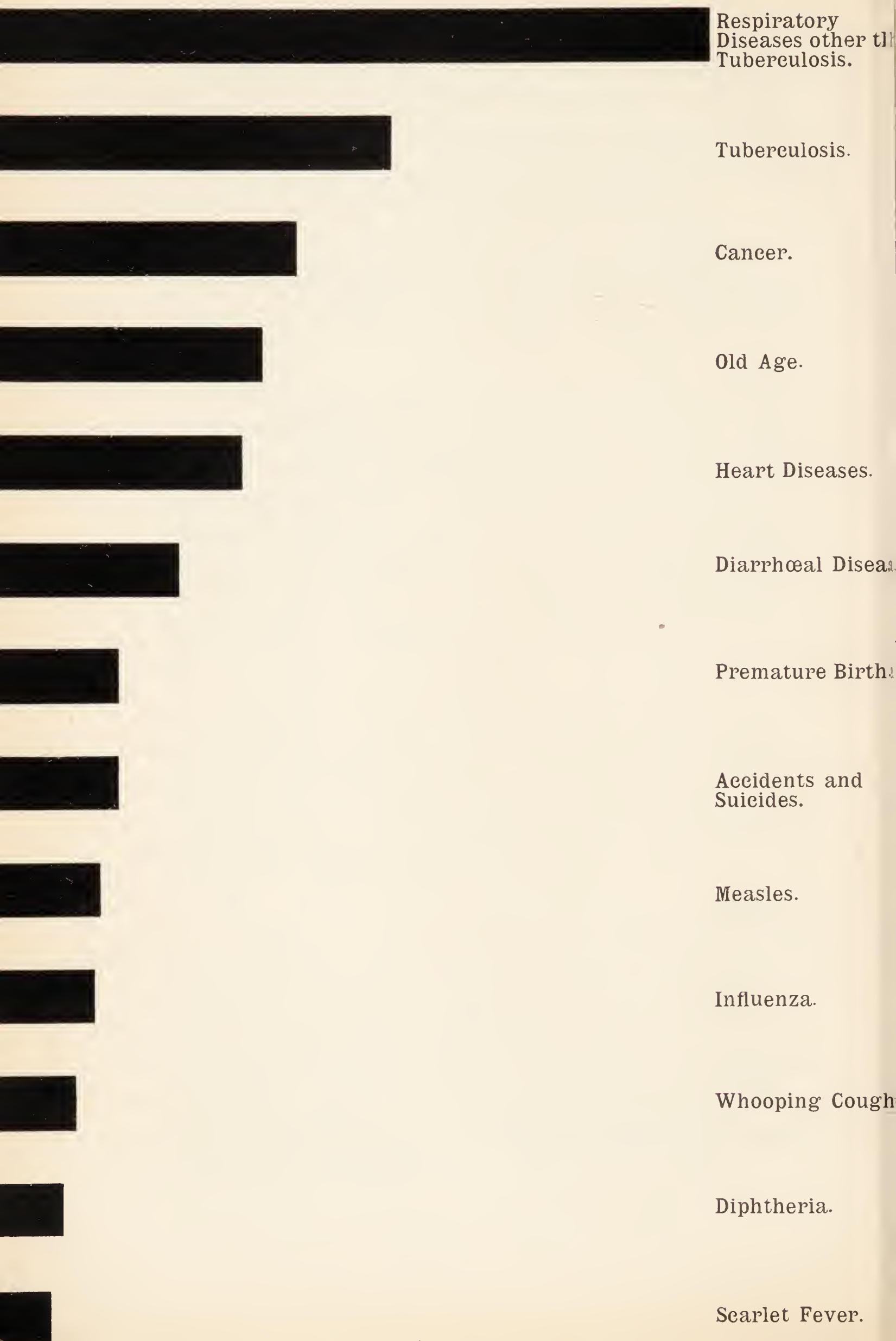
A County Bye-law prohibiting spitting on any floor, side or wall of any public carriage, public hall, public waiting room or place of public entertainment, has been in force since August 4th, 1903.

With the above exceptions, no special measures were taken to combat Tuberculous disease until the year under review, when the Public Health (Tuberculosis) Regulations, 1908, enabled further steps to be taken. The Regulations came into effect on January 1st, 1909, and provide for the notification to Medical Officers of Health of cases of Pulmonary Tuberculosis (Phthisis) occurring among the inmates of Poor Law Institutions or amongst persons under the care of District Medical Officers, and for the taking of certain measures in such cases.

Although the order has reference to one class of the community only, it is the class amongst which the disease is most rife, and amongst which ignorance of its infective nature and neglect to guard against its spread are most prevalent; the measures which the order enables to be taken should therefore have a marked effect in checking the disease.

During the year, 26 cases were notified under the Regulations. The homes of all these were visited with as little delay as possible and revisited from time to time. In nearly every instance the first visit was paid by your Medical Officer, who gave full instructions for precautionary measures to be taken to prevent the spread of the disease. Disinfectants were supplied in every case, and in 17 of the cases the rooms which had been occupied by the patients were thoroughly disinfected by the staff of the Health Department.

DIAGRAM SHOWING THE RELATIVE INCIDENCE OF THE PRINCIPAL CAUSES
OF DEATH.—CHART IV.



The bulk of the patients notified under this system are in an advanced stage of Phthisis and little can be done beyond endeavouring to render them free from danger to others ; but occasionally early cases which might be cured by timely sanatorium treatment are met with, and the provision of a few beds for such cases would be of very great value.

At the present time there is no provision for sanatorium treatment of early cases of Phthisis occurring in this District, and the only provision for the treatment of advanced cases are wards specially set aside for that purpose in the Poor Law Infirmary at West Bromwich.

Unfortunately the dread of the stigma of pauperism prevents the latter being resorted to excepting by persons in the extremity of destitution.

Cancer.—Fifty-one deaths were due to Cancer and allied forms of malignant disease of various organs, the ages at death being as follows :—

Age.	No. of Deaths.	Age.	No. of Deaths.
0—30	1	60—65	5
30—35	0	65—70	7
35—40	0	70—75	4
40—45	2	75—80	0
45—50	12	80—85	2
50—55	7		
55—60	11	Total	51

The death-rate is 0·70 compared with 0·95 in 1908, 0·86 in 1907, and an average of 0·68 for the 10 years 1897-1906.

Unfortunately the fall in the death-rate cannot be regarded as other than temporary, and it is probably complementary to

the unusually high rate experienced in the previous year. At present, Cancer and allied diseases are quite beyond the control of preventive medicine and will probably remain so until light has been thrown upon their causation. In spite of many years of highly skilled research, the etiology of these diseases remains in obscurity. Two important facts appear to be proved, however, viz., that Cancer is not infective in the ordinary sense and that it is not inherited.

Injuries.—Twenty-one deaths were due to violence. The death-rate was 0·29, the average of the preceding ten years being 0·32.

Ward Comparisons.—Table E on page 42 gives the comparative statistics of the health of the five wards during 1902 to 1909, and the average for the six previous years.

Murdock Ward again has the highest birth-rate, death-rate and epidemic death-rate, as well as the highest death-rate from tuberculous diseases and the highest rate of infantile mortality. Heathfield has the lowest birth-rate, being a little more than half that of Murdock Ward.

INCIDENCE AND PREVENTION OF INFECTIOUS DISEASE.

In June, 1883, the Handsworth Local Board instituted a voluntary system of Notification of Infectious Disease whereby medical practitioners notifying a case of Scarlatina, Diphtheria, Enteric Fever or Small Pox, received a fee of half-a-crown for each case notified. This arrangement continued in force until the adoption of the Infectious Disease (Notification) Act, which came into operation on the first day of March, 1890. The notifications received in the years 1890–1909 are given in Table F on page 45.

In the following table the cases notified in each quarter of the year 1909 are given :—

TABLE G.

	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Total.
1st Quarter	...	103	27	5	...	5	...	...	1	...	10	151
2nd ,, 	87	17	...	...	4	...	...	...	...	14	122
3rd ,, 	120	20	...	...	...	..	...	...	...	7	147
4th ,, 	122	24	...	...	4	...	...	...	...	14	164
Totals 	432	88	5	...	13	...	...	1	...	45	584

The number of cases notified of each disease per 1,000 of the population, that is to say the attack-rates, are given for each year since the Infectious Disease (Notification) Act came into force, in Table H on page 46.

General Procedure.—As soon as possible after notification of an infectious disease is obtained, the infected premises are visited and examined, and any sanitary defects are noted. An enquiry is made as to the population residing on the premises, their food supply, water supply, laundress, the schools attended, the means of isolation available and the origin of the infection. These particulars are registered by the Sanitary Inspector. After the patients have been removed to the Hospital, or have recovered at home, the infected rooms are disinfected with formaldehyde and the infected bedding and clothes disinfected again at the disinfecting station. In the meantime notice has been given to the schools attended of the existence of infectious disease in the infected houses, so that children residing at these houses may be kept away from school until all danger of spreading disease is past. The attention of the owners of the houses is called to any sanitary defect in the usual way. The premises are further visited from time to time as deemed necessary. During the past year 1,444 visits were thus paid, 386 notices were sent to schools and 384 notices to

the Education Committee, 515 houses, or parts of houses, and 4 elementary schools were disinfected with formaldehyde by Lingner's apparatus, and 98 houses, or parts of houses, were stripped or lime washed, 483 lots of bedding, &c., comprising 2,849 articles, were disinfected by the disinfection apparatus at Handsworth and 69 articles destroyed. During the year all the disinfection has been done at your own disinfecting station at Queen's Head Road. The number of stovings was 324.

Smallpox.—Provision is made for the isolation of cases in the Smallpox Hospital of the West Bromwich Corporation. No case has been notified since 1904.

Vaccination.—The following returns are furnished by the Vaccination Officer and relate to the whole parish of Handsworth for the years ending June 30th, 1894 1909, respectively :—

	Births Registered	Successfully Vaccinated	Insusceptible	Had Smallpox	Died Unvaccinated	Postponed	Removed to other District— traced	Removed— unknown	Defaulters	Re-vaccinated	Percentage of Defaulters to Births	Conscientious Objectors
1894	976	716	12	0	77	42	18	68	43	361	4·4	...
1895	1072	684	13	0	83	57	4	10	221	18	20·6	...
1896	1046	561	7	0	97	47	0	0	339	(?)	32·4	...
1897	1138	569	4	0	101	61	0	0	403	(?)	35·4	...
1898	1189	497	6	0	106	46	0	0	524	(?)	44·1	10
1899	1327	672	14	0	145	64	39	100	278	(?)	20·9	15
1900	1368	775	7	0	145	71	26	92	248	(?)	18·1	4
1901	1410	878	3	0	147	61	13	198	94	11	6·7	16
1902	1410	1032	4	0	147	71	22	112	12	552	0·9	10
1903	1532	1213	7	0	121	56	40	66	17	59	1·1	12
1904	1514	1215	4	0	145	49	20	64	4	68	0·3	13
1905	1569	1285	8	0	123	50	30	48	...	4	...	17
1906	1563	1282	8	0	124	41	33	47	5	4	0·3	23
1907	1582	1279	8	0	125	42	28	60	5	4	0·3	35
1908	1568	1198	15	0	123	42	39	61	0	2	0	90
1909	1605	1239	13	0	104	42	37	56	0	10	0	108

CASES OF SCARLET FEVER PER 1,000 OF THE ESTIMATED POPULATION.—CHART V.

1890. 1891. 1892. 1893. 1894. 1895. 1896. 1897. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 1908. 1909.

8

7

6

5

4

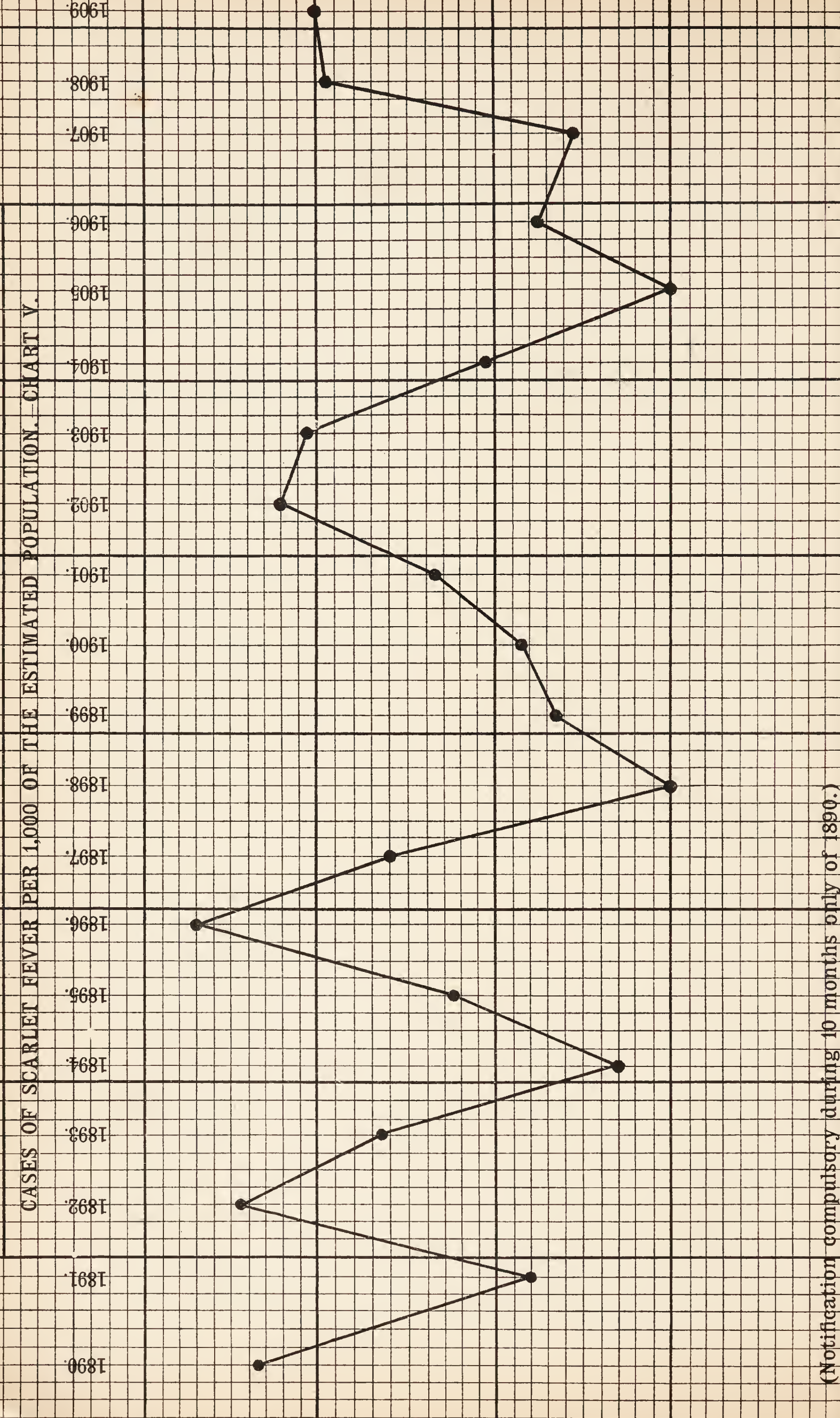
3

2

1

0

(Notification compulsory during 10 months only of 1890.)



Scarlet Fever.—The epidemic which visited the District in the Autumn of 1908 continued with but slight remission throughout 1909. The mildness of type was maintained for the most part, virulent cases being exceptional. Indeed in many cases the constitutional symptoms were so trivial and the rash so transitory that the nature of the illness was unsuspected, and medical advice was not sought nor any precautions taken until the spread of the disease to other members of the family aroused suspicion. It appears probable that “missed” cases of this kind were largely responsible for the continuance of the epidemic.

The system of notification by Teachers and School Attendance Officers (see page 88) of suspicious illness occurring among elementary school children proves of great value in detecting cases of this kind, but in spite of the utmost vigilance some are bound to escape notice.

Chart 5 shows the attack-rate for each year since notification of Scarlet Fever became compulsory, and at the same time illustrates the tendency of epidemics of the disease to recur in cycles or waves.

During investigation of the notified cases, many sanitary defects, chiefly of a trivial nature, were detected in the homes, but no connection could be traced between these and the incidence or severity of the disease. Neither was there reason to suspect the milk supply in any instance, and so far as could be ascertained personal infection was the chief if not the sole factor in the spread of the disease.

There is no Isolation Hospital in the District, although a site for one was secured in 1906.

Provision is made for the isolation of Scarlatina at the West Bromwich Infectious Hospital. In October, 1906, the Health Committee expressed the wish that removal to hospital should be resorted to only in specially urgent cases, and that isolation at home should be carried out wherever practicable. In accordance with this wish only 115 cases out of the 432

notified were admitted to hospital during 1909. Decision as to removal was chiefly based upon the number and ages of the susceptible individuals in the households attacked and the character and situation of the rooms available for isolation.

The cases occurred in 325 houses.

In 7 instances 5 cases occurred in 1 house.

| | | |
|-------|----------|-----|
| „ 4 | „ 4 | „ „ |
| „ 13 | „ 3 | „ „ |
| „ 41 | „ 2 | „ „ |
| „ 260 | „ 1 case | „ „ |

The primary cases, *i.e.* first cases in a household, numbered 321, and of these 239 were treated at home and 82 sent to hospital.

In the houses of 194 of the 239 home-treated cases, *i.e.* 81 per cent., no further case arose; while only 55 of the 82 homes from which cases were removed to hospital, *i.e.* 67 per cent., remained free from further attacks.

These figures are given for what they are worth: they cannot fairly be used to compare the results of home isolation with those of hospital isolation, for, generally speaking, the hospital patients came from poor and crowded houses, while the cases treated at home were much more favourably situated as is shown by the following particulars:—

| | Cases
treated at
Home. | Cases
removed to
Hospital. |
|---|------------------------------|----------------------------------|
| Average No. of Inmates per room (bed and living) | 0·92 | 1·37 |
| Average No. of Children under 14 who had not previously had Scarlet Fever, per house | 1·30 | 2·47 |
| Average No. of Persons over 14 who had not previously had Scarlet Fever, per house | 2·14 | 2·58 |

The number of “return cases” was unusually large, *viz.*, 21 arising from 15 infecting cases, and occurring at intervals of from 3 to 20 days after the discharge of a patient from hospital. The parents were entirely to blame for most of the “return cases,” as in nearly every instance the verbal and

written instructions given them at the hospital were ignored, and the discharged children were allowed to mix with their brothers and sisters as usual immediately on their return home, a procedure which always involves risk of infection, no matter what elaborate precautionary measures may have been taken at the hospital.

Scarlet Fever and Schools.—Although no less than 204 of the 321 primary cases occurred in school children, schools did not appear to play a very prominent part in the dissemination of infection. The 204 cases were spread over the whole year, and were distributed among 31 public and private schools, in only one of which was there marked incidence in a particular class or department. This was the Infants' Department of Grove Lane School, in which, at the end of December, 6 cases occurred practically simultaneously. The school was visited by your Medical Officer and all children examined. One child in the early stage of Scarlet Fever was found, but the infecting case or cases could not be traced. It was considered advisable to close the schools at once, instead of waiting for the holidays which commenced two days later. The outbreak rapidly subsided.

Other schools were frequently visited and search made for missed cases. Two children in various stages of the disease were found at different times in school, while 25 further unrecognised cases were found among children absent from school and reported to the Medical Officer by teachers or attendance officers as suffering from suspicious symptoms.

In accordance with clause 57 of the Public Health Acts Amendment Act, 1907, all school children who had suffered from notifiable infectious disease were examined before being allowed to return to school. Of 125 Scarlet Fever cases thus examined no less than 42 showed some slight complication, usually nasal or aural discharge, which had developed since the apparent completion of convalescence and which was liable to prove infectious. Permission to return to school was not given until all such symptoms had disappeared.

Ten of the cases of Scarlet Fever notified in 1909 died; the fatality was therefore 2·31 per hundred cases.

The fatality in 1908 was 2·38 per cent. ; in 1907, 0·92 ; in 1906, 2·13 ; in 1905, 2·35 ; in 1904, 1·1 ; in 1903, 3·3 ; in 1902, 2·2 ; in 1901, 3·8 ; in 1899, 1·3 ; in 1898, 1·1 ; in 1897, 1·8 ; and in 1896, 0·6.

Diphtheria and Membranous Croup.—No provision is made for the isolation of these diseases. In better class houses home treatment appears to be quite satisfactory ; but in the homes of the poor, proper isolation and nursing can rarely be carried out, and the adoption of some arrangement by means of which the most urgent cases can receive hospital treatment is strongly recommended.

Cases are admitted into the General and Children's Hospitals, Birmingham, but only when the operation of tracheotomy is required.

During the year 1 child was admitted to the Children's Hospital and 1 was sent by the medical attendant to the Birmingham City Hospital, Lodge Road, and there admitted.

The 93 cases of Diphtheria and Membranous Croup (the latter is a form of Diphtheria especially affecting the air passages) occurred in 78 houses.

In 1 instance a house had 5 cases.

„ 1 „ „ 4 „

„ 8 instances „ 2 „

„ 68 „ „ 1 case.

No complaint whatever could be made of the sanitary condition of 58 of the 78 infected houses, and in the remaining 20 the defects found were for the most part of a trivial character and appeared to bear no relationship to the disease other than that of a possible predisposing factor.

Of the 93 notified cases, no bacteriological examination was made in 38 ; a positive result was obtained in 41 and a negative result in 14 cases.

Specimens from a further 76 cases of sore throat were submitted by medical practitioners for bacteriological examination and 69 negative and 7 positive results were obtained. None of these cases was notified as Diphtheria.

In April, special measures were instituted by your Medical Officer with a view to the detection of unrecognised cases of Diphtheria occurring in elementary school children. Arrangements were made with teachers and Attendance Officers by means of which all cases of sore throat and of chronic nasal discharge, not medically attended, are reported. All such reported cases are seen by the Medical Officer with the least possible delay, and in every instance swabs are taken for bacteriological examination, while the child is excluded from school pending the receipt of the bacteriologist's report. In cases where the clinical appearances are suggestive of Diphtheria immediate medical attendance is urged, and in all cases isolation at home is advised until pratique has been received from the Health Department or from the medical attendant.

These somewhat stringent precautions are held to be justified by the now well-known fact that the Diphtheria Bacillus may be associated with even the mildest form of sore throat and also by the records of the District for the past few years, which, on analysis, point to school as the chief medium for the dissemination of the disease.

Two hundred and seventy-five cases of sore throat and of nasal discharge were thus examined from April to the end of the year, and bacteriological examination showed the Klebs-Loeffler Bacillus, the causal organism of Diphtheria, to be present in 41 of these.

In addition to the above, 28 children, who had been in contact with cases of Diphtheria in school, were swabbed.

Altogether over 400 specimens were submitted by your Medical Officer for bacteriological examination during the year.

The examinations were conducted at the University of Birmingham by arrangement with the Staffordshire County

Council, and the reports received by telephone usually within 24 hours of the despatch of the specimen.

While these special precautions are by no means complete, they cannot fail to remove a certain number of potentially infectious cases from circulation, and thus assist in stamping out the disease.

Antitoxin has been supplied free of charge to medical practitioners since August 1st, 1906.

In view of the fact that antitoxin treatment is most effectual when the remedy is administered early in the disease, medical practitioners are advised always to keep a stock in hand sufficient for at least one patient.

During the year 106,000 units were issued.

Of the cases of Diphtheria and Membranous Croup notified in 1909, 12 died; the fatality was 12·9 per cent.; in 1908 it was 12·6 per cent.; in 1907, 14·4; in 1906, 4; in 1905, 12; in 1904, 23·7; in 1903; 8·7; in 1902, 13·8; in 1901, 18; in 1898, 6·4; in 1897, 13; and in 1896, 24·6.

Measles is not a compulsorily notifiable disease in Hands-worth. The Teachers and Attendance Officers, however, notify the Medical Officer of the existence of cases of Measles in the homes of elementary school children.

In the spring, the District was visited by a very wide-spread epidemic and it was considered advisable to close the following schools, which were markedly affected:—

| | | | |
|--|-----|-----|--------------------|
| Grove Lane Infants' Department closed Feb. 15—March 8. | | | |
| St. Michael's | do. | „ „ | 15— „ 8. |
| Wattville Street | do. | „ „ | 25— „ 15. |
| Canterbury Road | do. | „ | March 10—April 20. |
| Westminster Road | do. | „ „ | 15— „ 20. |
| Boulton Road | do. | „ „ | 15— „ 20. |
| Holy Trinity | do. | „ „ | 15— „ 20. |
| Rookery Road | do. | „ | April 22— May 17. |
| Birchfield Road | do. | „ „ | 22— „ 17. |
| St. Augustine's | do. | „ | July 5—July 24. |

Your Medical Officer made a point of visiting, as far as practicable, all affected families reported as being without medical attendance, with the object of impressing upon parents the serious nature of the disease and the necessity for isolation and particularly for the protection of the younger children from infection.

In many instances it was found necessary to urge parents, who were adopting an expectant policy, to seek immediate medical treatment for children dangerously ill. In 5 cases it was found that the supposed Measles was really Scarlet Fever.

Altogether 255 families were visited. The mortality was not so heavy as might have been expected from so severe an epidemic.

Typhoid (Enteric) Fever.—The 13 cases notified occurred in 13 separate houses.

Four of the cases were treated at the General Hospital, Birmingham, and 1 at the West Bromwich Union Infirmary.

In no instance could the origin of infection be traced. All the houses were supplied with Birmingham Corporation water only. So far as could be ascertained, no food liable to convey infection had been partaken of by any of the patients within a month of the onset of illness. The few sanitary defects found on the premises were not of such a nature as to suggest a causal relationship to the disease; while the fact that no two cases occurred in the same house, or even in the same locality, also appears to negative the probability of a local origin. Seven of the patients worked in other districts.

Three deaths occurred: the case mortality therefore was 23 per cent., as against 7·7 per cent. in 1908 and 20 per cent. in 1907.

Puerperal Fever.—One case was notified. The patient was attended in her confinement by two women, neither of whom was a certified midwife.

The Midwives Act is administered by the Staffordshire County Council.

Erysipelas.—The 45 cases occurred in 45 separate houses. In three instances minor sanitary defects were found on the premises.

No death occurred.

Plague was added to the list of notifiable diseases by an order of the Local Government Board, dated the 19th of September, 1900.

GENERAL SANITARY MATTERS.

Refuse and Sewage Disposal.—The whole of the District is sewered, with the exception of the rural area, an area overlying colliery workings and liable to subsidence, and a tract of low-lying land at Witton which can now be served by the new Sewage Pumping Station and will shortly be sewered.

Of the 16,166 houses in the District 16,029 are connected with the sewers.

The bulk of the houses are provided with water closets and only 425 privy middens now remain.

The sewers are in connection with the outfall sewers of the Birmingham Tame and Rea District Drainage Board, of which Board Handsworth is a constituent Authority.

The collection and disposal of domestic refuse is undertaken by the District Council.

Ashbins, which number 7,769, are emptied every 14 days, while ashpits, which number 6,974, are emptied every 8 weeks.*

Movable receptacles for ashes are being gradually substituted for the middens, when privy-middens are converted, and are also provided in all newly-built houses.

Privy middens are emptied on application only; the contents are taken to farms.

* During the summer of 1909 all ash receptacles in Murdock Ward and in a few streets of Sandwell Ward were emptied weekly.

The refuse collected from ashpits and ashbins is dealt with at the Council's destructor. About 14,098 tons of domestic refuse were burnt during 1909 and in addition 150 tons of trade refuse.

The Superintendent of the Cleansing Department reports that 1,446 applications for cleansing ashpits were received, and that 43,210 dry ashpits and 1,353 privy-middens were emptied and cleansed during the year; while 208,434 ashbins were emptied.

Water Supply.—The District is supplied by the Birmingham Corporation Water Department. The water, originally liable to have a plumbo-solvent action, is now specially treated.

Several samples were tested during the year, but none showed any trace of plumbo-solvency.

A few wells still exist.

House-to-House Inspection.—During the year a house-to-house inspection has been made in the following roads and streets, viz.:—Franchise Street, Wellhead Lane, Oscott Road, Aston Lane, Railway Road, North Road and London Road.

This area embraces much of the smaller house property and some of the larger house property in Birchfield Ward.

In this way 517 houses were inspected and many dangerous conditions were discovered and remedied. The following is a summary of the results of the inspection :—

| | | | | | | | | | |
|---|-----|-----|-----|-----|-------------------------------------|-----|-----|-----|-----|
| Privies | ... | ... | ... | 24 | Defective Traps and Drains | 5 | | | |
| Ashpits, Dry | ... | ... | ... | 282 | Ashbins | ... | ... | ... | 130 |
| Ashpits, Covered | ... | ... | ... | 274 | Waste-water Flush Closet | 1 | | | |
| Ashpits, Uncovered | ... | ... | ... | 8 | Lip-traps on Drains | ... | ... | ... | 15 |
| Ashpits over 20 square feet
in area | ... | ... | ... | 3 | Bell-traps on Drains | ... | ... | ... | 2 |
| Wet Ashpits... | ... | ... | ... | 14 | Houses supplied with Well-
Water | ... | ... | ... | 3 |
| Outdoor Water-closets | ... | ... | ... | 448 | Number of Wells | ... | ... | ... | 2 |
| Indoor Water-closets | ... | ... | ... | 11 | Back to back Houses | ... | ... | ... | 33 |
| Ventilation Pipe under 3in.
diameter | ... | ... | ... | 5 | | | | | |

Nuisances.—During the year, 8,817 inspections and observations were made for the discovery and abatement of nuisances within the District, 2,604 informal notices were sent out for the abatement of nuisances, and were in 2,555 cases followed by the abatement of the nuisances, leaving 49 on the books at the end of the year. This shows an increase in the year of 48 inspections, &c., 142 notices and of 169 nuisances abated, as compared with the figures of 1908.

Final notices to the number of 211 were sent out.

Six summonses were taken out during the year. All were withdrawn on the necessary work being done and on payment of the costs, £1 9s. 6d., the whole of the other work being executed in a satisfactory manner without recourse to legal proceedings.

In 131 cases privies were converted into water-closets, and 277 deep wet ashpits were filled up after notice had been served on the owners, in addition to many which were converted without notice on the suggestion of the Inspector; an increase of 106 as compared with the year 1908.

Slaughter-houses.—The 12 slaughter-houses in the District have been inspected on 220 occasions, frequent inspections having been made while slaughtering was taking place. In 12 cases notices were served to abate nuisances.

In 2 cases the drains were taken up and properly relaid; the floors in 2 cases were also re-paved, the bricks being set in cement, and offensive accumulations removed in 8 cases. In 1 case the slaughter-house was repaired and new and larger fasting pens built. No seizure of diseased meat was made.

Food and Drugs.—The Sale of Food and Drugs Acts are administered by the Staffordshire County Council.

Bakehouses.—The 42 bakehouses registered in the District were inspected on 102 occasions, and in 18 cases notices to cleanse and limewash and to abate nuisances were served.

Seven bakehouses are at present void, and 3 bakehouses have been rearranged and improved. The ventilation of 1 bakehouse was improved.

Houses Let in Lodgings.—Of these there are practically none in the District and no Bye-laws respecting them have been framed.

Offensive Trades.—No offensive trades are established in the District.

Schools.—All the public elementary schools were visited during the year. No grave sanitary defects were found. All the schools are supplied with Birmingham Corporation water.

Pollution of Rivers and Streams.—During the earlier part of the year a sewer was constructed in Albion Road at the instigation of your Public Works Committee, acting upon a report from the Health Committee, and all houses in the road were connected therewith. The pollution, reported upon last year, of the brook which forms the southern boundary of this road was thus removed. Complaints were received in July that the River Tame was grossly polluted at Hamstead Mill, and on investigation the complaints were found to be well grounded. The pollution appeared to proceed from sewage works some distance up the stream. The Staffordshire County Council were communicated with, and a reply was received to the effect that work was in progress which would mitigate the nuisance. The condition of the stream has since considerably improved.

Workrooms and Workshops.—The 230 workrooms and workshops registered in the District were visited on 325 occasions. Notices to cleanse and limewash were served in 31 cases, and notices to abate nuisances were given in 25 cases. In 3 cases privies were converted into water-closets, in 2 cases separate accommodation for the sexes was provided, and in 1 case further closet accommodation was provided; in 9 cases drains were opened, repaired and properly trapped; in 2 cases the ventilation was improved; in 2 cases floors were drained,

and 1 case of overcrowding was abated. There are 9 "domestic workshops" in the District, in which are carried on the following trades:—4 dressmakers, 3 laundries, 1 tailor and 1 picture-frame maker. Section 22 of the Public Health Acts (Amendment) Act, 1890, is in force in the District. The standard of "sufficiency and suitability" of sanitary accommodation adopted is that of the Sanitary Accommodation Order of February 4th, 1903.

THE MILK SUPPLY.

Cowsheds and Dairies.—During 1908 there were 12 cowsheds in occupation in the District. The largest number of cows kept was 215, the average number being 198. In 8 sheds the cubic space for each cow is from 825 cubic feet to 993 cubic feet. In 4 sheds the cubic space is a little under 800 cubic feet. From the smaller sheds the cows are turned out daily (once or twice a day) during the winter months. In the summer time all the cows are out day and night except for a few hours for milking.

In most of the sheds good ventilation will be possible when the owners are sufficiently advanced to realise that the stopping-up of ventilators is certainly against their own interests.

The water supply is obtained from springs, wells and pools, and in most cases appears to be abundant.

The premises of 15 registered cowkeepers have been inspected on 181 occasions, and in 11 cases notices to abate nuisances have been served.

In 1 case the shed has been properly ventilated, paved and drained, and the drains in 2 cases have been relaid, properly trapped and ventilated, and in 8 cases offensive accumulations have been removed. One cowshed has been partly rebuilt and enlarged to give increased air space to animals kept there.

The premises of the 267 milkshops and dairies on the register were inspected on 290 occasions and found in a satisfactory state, with the exception of 2 where it was necessary to thoroughly cleanse the premises.

During the year 3 cowsheds have been void.

Imported Milk.—From 500 to 600 gallons of milk per day are brought into the District from the country to railway stations, G.W.R. and L. & N.W.R. (Perry Barr) stations. An extraordinary lack of care is obvious. The churns are left on station platforms without being locked or fastened securely in any way. There are thus presented all kinds of possibilities in the way of pollution. The milk churns appear to be sent back without being washed.

A very large quantity of milk also is brought into the District by local purveyors from dealers in Birmingham and from farmers in the country districts near Handsworth. Some of the milk dealers and farmers personally bring milk into the District for distribution. In these cases the churns are frequently left at street corners and other places. Here again the lids of the churns are not locked or securely fastened. In this way it is obvious that dangerous pollution is still more easily possible.

No special tests for Tubercle Bacilli in milk were carried out.

Certain sections known as the Milk Clauses, which give powers to deal with Tuberculous milk, have been embodied in the Handsworth Urban District Council Bill now in Parliament.

Housing Accommodation and Housing Improvement.—There is ample housing accommodation for working class people who are prepared to pay a weekly rental of from 5/6 to 7/6, inclusive of rates; but there are comparatively few houses at less than the former figure. Generally speaking, the working class dwellings, though not built very substantially, are of good type. The defects in design most commonly met with are the result of over-economy of space, and consist of steep, unlighted stairs, the absence of an upstairs passage—the bedrooms opening out of one another, an arrangement which is not conducive to decency and which renders satisfactory home isolation of infectious disease impossible—and inadequate pantry accommodation.

Houses of the back-to-back type number about 620, all erected prior to 1874.

There are no enclosed courts in the District. With few exceptions the courts and yards are paved.

At the instigation of the Health Department, 87 houses were thoroughly overhauled and repaired during the year. In 41 of these, which were without damp courses, proper damp courses were inserted. Three houses were demolished and 7 were closed pending demolition.

The Building Bye-Laws in force in the District demand a minimum open space at the rear of buildings of 200 square feet, free from any erection and a minimum distance across such space varying between 15 feet in the case of single-storied houses and 25 feet for three-storied houses.

The supervision of the erection of new houses is undertaken by the Surveyor's Department.

No action was taken under the Housing of the Working Classes Act during the year.

SUMMARY OF SANITARY WORK

done in the Inspector of Nuisances Department during the year 1909.

| | | | | Number of | | Abatement Notices. | | Nuisances Abated after Notice by | |
|-----------------------------|---------------------------|--------------------------|-----|------------------------------------|----------------|------------------------|----------------------|----------------------------------|------------|
| | | | | Inspections and Observations made. | Defects found. | Informal by Inspector. | Formal by Authority. | Inspector. | Authority. |
| Dwelling-houses and Schools | { | Foul Conditions ... | ... | 456 | 198 | 198 | 24 | 176 | 18 |
| | | Structural Defects ... | ... | 872 | 381 | 381 | 16 | 364 | 14 |
| | | Over-crowding ... | ... | 68 | 22 | 22 | 3 | 18 | 3 |
| | | Unfit for Habitation ... | ... | 30 | 7 | 7 | 1 | .. | ... |
| | Lodging-houses ... | | | ... | ... | ... | ... | ... | ... |
| | Dairies and Milkshops ... | | | 290 | ... | ... | ... | ... | ... |
| | Cowsheds ... | | | 181 | 11 | 11 | ... | 11 | ... |
| | Bakehouses ... | | | 110 | 18 | 18 | 1 | 17 | ... |
| | Slaughter-houses ... | | | 220 | 12 | 12 | ... | 12 | ... |
| | Canal Boats ... | | | ... | ... | ... | ... | ... | ... |
| House Drainage | Ashpits and Privies ... | | | 1980 | 368 | 368 | 55 | 310 | 49 |
| | { | Deposits of Refuse and | ... | 371 | 143 | 143 | 3 | 139 | 2 |
| | | Manure ... | ... | | | | | | |
| | { | Water-closets ... | ... | 1361 | 441 | 441 | 31 | 407 | 31 |
| | | Defective Traps ... | ... | 353 | 154 | 154 | 9 | 141 | 8 |
| | | No Disconnection .. | ... | 150 | 46 | 46 | 3 | 43 | 3 |
| | | Other Faults ... | ... | 1691 | 574 | 574 | 40 | 528 | 37 |
| | | Water Supply ... | ... | 65 | 21 | 21 | ... | 21 | ... |
| | | Pigsties ... | ... | ... | ... | ... | ... | ... | ... |
| | | Animals improperly kept | ... | 183 | 47 | 47 | 2 | 44 | 2 |
| | | Offensive Trades ... | ... | ... | ... | ... | ... | ... | ... |
| | | Smoke Nuisances ... | ... | 35 | 6 | 6 | 1 | 5 | ... |
| | | Other Nuisances ... | ... | 401 | 155 | 155 | 22 | 131 | 21 |
| | Totals ... | | | 8817 | 2604 | 2604 | 211 | 2367 | 188 |

| | | | | | | |
|--------------------|---|-------------------------------------|-----|----------------------------|-----|-----|
| Unwholesome Food | { | Number of Seizures | ... | ... | ... | ... |
| | | Condemned by Magistrate | ... | ... | ... | ... |
| | | Prosecutions for Exposing for Sale | ... | ... | ... | ... |
| | | Convictions ditto ditto | ... | ... | ... | ... |
| Food and Drugs Act | { | Samples taken for Analysis | ... | ... | ... | ... |
| | | Number found Adulterated, &c. | ... | ... | ... | ... |
| | | Proceedings taken | ... | ... | ... | ... |
| | | Number of Convictions | ... | ... | ... | ... |
| | | Samples of Water taken for Analysis | ... | ... | ... | ... |
| | | ,, | ,, | Condemned as Unfit for Use | | |

PRECAUTIONS AGAINST INFECTIOUS DISEASE.

| | | |
|--|--------------------------|------|
| Lots of Infected Bedding | Disinfected or Destroyed | 2918 |
| Houses Disinfected after Infectious Disease | ... | 515 |
| Schools ditto ditto | ... | 4 |
| Prosecutions for not Notifying Existence of Infectious Disease | | |
| Convictions ditto ditto | | |
| Prosecution for Exposure of Infected Persons or Things | | |
| Convictions ditto ditto | | |

Signed, ALBERT HODGES, A.R.S.I.,

April 25th, 1910.

Inspector of Nuisances.

Surveyor's Report respecting new buildings, &c.,

For the Year 1909.

During the year ending December 31st, 1909, 108 Plans were submitted, of which 96, representing 266 houses, 47 alterations and additions, 1 new chapel, additions to Villa Road Post Office and additions to 1 factory were approved.

No action was taken in regard to 8 Plans.

The number of houses passed for occupation was 397.

No prosecution has been instituted during the year.

Fifty-two houses in Alexandra Road are standing incomplete.

During the previous year 158 Plans were submitted, of which 139, representing 624 houses, 48 alterations and additions, 1 elementary school, 1 secondary school, 1 laundry and additions to 1 factory were approved.

No action was taken with regard to 10 Plans.

The number of houses passed for occupation was 553.

TABLE C.

Table showing the number of deaths from each of the seven chief epidemic diseases.

| Diseases. | 1871-5. | 1876-80. | 1881-85. | 1886-90. | 1891-95. | 1896-1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|---------------------------|---------|----------|----------|----------|----------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population | 16,735 | 20,710 | 25,148 | 30,073 | 36,350 | 44,540 | 53,000 | 56,141 | 59,000 | 61,500 | 65,249 | 66,276 | 69,122 | 70,518 | 71,935 |
| Smallpox | ... | 5.0 | 3.0 | 0.0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scarlatina | ... | 9.0 | 8.2 | 3.0 | 3.6 | 4.4 | 8 | 8 | 13 | 5 | 3 | 5 | 2 | 10 | 10 |
| Measles | ... | 1.0 | 6.2 | 5.6 | 6.2 | 9.6 | 12 | 10 | 8 | 3 | 8 | 3 | 18 | 1 | 18 |
| Typhoid Fever | ... | 7.6 | 2.8 | 3.8 | 3.0 | 5.6 | 7 | 6 | 1 | 6 | 2 | 3 | 4 | 1 | 3 |
| Diphtheria | ... | 3.8 | 2.6 | 4.6 | 3.6 | 8.4 | 9 | 8 | 4 | 14 | 4 | 2 | 11 | 12 | 12 |
| Whooping Cough | ... | 3.8 | 8.2 | 5.6 | 9.4 | 1.2 | 12 | 16 | 4 | 22 | 4 | 31 | 12 | 19 | 14 |
| Diarrhoea | ... | 10.4 | 13.0 | 13.4 | 14.0 | 39.2 | 35 | 4 | 20 | 31 | 20 | 60 | 5 | 17 | 19 |
| Totals | ... | 40.6 | 44.0 | 40.6 | 40.4 | 68.4 | 83 | 52 | 50 | 81 | 41 | 104 | 52 | 60 | 76 |
| Mortality per 1,000 | ... | 2.4 | 1.7 | 1.35 | 1.1 | 1.8 | 1.6 | 0.92 | 0.85 | 1.3 | 0.63 | 1.5 | 0.75 | 0.87 | 1.05 |
| Per cent. of total deaths | ... | 15.2 | 12.5 | 11.07 | 8.0 | 13.8 | 11.4 | 8.3 | 7.7 | 10.7 | 6.3 | 14.0 | 7.5 | 7.8 | 10.3 |

TABLE E.

Birth-rates, death-rates, infantile mortality, and death-rates from certain groups of diseases in the various wards of Handsworth for each of the years 1902-9 with average of previous six years.

| BIRCHFIELD WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 27·4 | 28·2 | 25·4 | 26·07 | 22·8 | 24·4 | 23·9 | 24·2 | 20·2 |
| Death-rate | 13·0 | 8·9 | 10·0 | 12·02 | 9·4 | 11·8 | 8·9 | 10·06 | 8·8 |
| Infantile mortality ... | 143 | 95 | 92 | 128 | 70 | 141 | 80 | 78 | 85 |
| Death-rates from— | | | | | | | | | |
| All Epidemic diseases | 2·0 | 0·7 | 1·13 | 1·8 | 0·9 | 1·9 | 1·08 | 0·98 | 0·47 |
| Tuberculous diseases | 1·0 | 1·1 | 1·13 | 0·77 | 0·98 | 0·8 | 0·70 | 0·74 | 1·02 |
| Lung diseases ... | 2·1 | 1·3 | 0·73 | 1·94 | 1·3 | 1·3 | 1·14 | 1·66 | 0·94 |
| Heart diseases ... | 1·1 | 0·9 | 0·81 | 1·01 | 1·3 | 0·7 | 1·21 | 0·55 | 0·35 |
| Cancer | 0·4 | 0·7 | 0·73 | 0·31 | 0·56 | 1·2 | 0·83 | 1·05 | 0·71 |
| Injuries | 0·3 | 0·2 | 0·24 | 0·46 | 0·34 | 0·2 | 0·32 | 0·30 | 0·53 |
| All other causes ... | 5·5 | 3·9 | 5·20 | 5·12 | 4·5 | 5·6 | 3·63 | 4·78 | 4·86 |

| HEATHFIELD WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 20·9 | 18·5 | 15·6 | 15·8 | 17·7 | 15·8 | 15·2 | 15·2 | 13·2 |
| Death-rate | 11·1 | 11·0 | 9·71 | 9·5 | 9·1 | 11·8 | 11·2 | 11·4 | 9·5 |
| Infantile mortality ... | 131 | 102 | 98 | 111 | 77 | 151 | 93 | 98 | 98 |
| Death-rates from— | | | | | | | | | |
| All Epidemic diseases | 1·6 | 0·6 | 0·82 | 0·61 | 0·64 | 0·93 | 0·83 | 0·30 | 0·50 |
| Tuberculous diseases | 0·9 | 0·7 | 0·92 | 0·41 | 0·36 | 1·35 | 1·32 | 1·00 | 0·70 |
| Lung diseases ... | 1·4 | 1·2 | 1·74 | 0·61 | 0·52 | 1·97 | 1·42 | 2·20 | 1·91 |
| Heart diseases ... | 1·1 | 2·2 | 0·51 | 1·23 | 0·82 | 0·93 | 1·42 | 1·00 | 0·50 |
| Cancer | 1·1 | 0·8 | 0·71 | 0·92 | 0·75 | 1·25 | 1·11 | 1·30 | 0·90 |
| Injuries | 0·2 | 0·1 | 0·31 | 0·31 | 0·33 | 0·1 | 0·10 | 0·20 | 0·10 |
| All other causes ... | 5·0 | 5·1 | 4·70 | 4·70 | 5·57 | 5·3 | 5·07 | 5·40 | 4·96 |

| MURDOCK WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 34·6 | 30·5 | 30·6 | 29·0 | 27·4 | 27·7 | 28·9 | 30·1 | 25·5 |
| Death-rate | 16·0 | 13·9 | 13·8 | 16·3 | 12·9 | 13·0 | 12·4 | 13·9 | 13·5 |
| Infantile mortality ... | 172 | 122 | 145 | 181 | 102 | 130 | 109 | 110 | 102 |
| Death-rates from— | | | | | | | | | |
| All Epidemic diseases | 2·7 | 1·5 | 1·33 | 2·25 | 1·5 | 2·76 | 1·30 | 1·59 | 2·61 |
| Tuberculous diseases | 1·3 | 2·2 | 1·7 | 1·33 | 1·4 | 0·92 | 1·38 | 1·21 | 1·38 |
| Lung diseases ... | 2·6 | 2·0 | 2·2 | 2·91 | 2·0 | 1·61 | 1·92 | 2·50 | 3·07 |
| Heart diseases ... | 1·1 | 1·3 | 1·06 | 1·33 | 1·4 | 0·76 | 1·23 | 0·75 | 0·84 |
| Cancer | 0·5 | 0·4 | 0·78 | 0·58 | 0·7 | 0·61 | 0·38 | 1·13 | 0·38 |
| Injuries | 0·6 | 0·3 | 1·0 | 0·33 | 0·33 | 0·23 | 0·38 | 0·37 | 0·23 |
| All other causes ... | 7·0 | 6·0 | 5·76 | 5·75 | 5·53 | 6·1 | 5·84 | 6·35 | 5·01 |

| SANDWELL WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 27·7 | 26·1 | 30·5 | 25·2 | 25·6 | 25·6 | 24·2 | 23·09 | 22·2 |
| Death-rate | 12·2 | 10·9 | 11·03 | 11·58 | 9·5 | 10·6 | 9·6 | 8·8 | 9·7 |
| Infantile mortality ... | 119 | 104 | 84 | 129 | 67 | 103 | 118 | 74 | 66 |
| Death-rates from— | | | | | | | | | |
| All Epidemic diseases | 1·9 | 1·2 | 0·86 | 1·82 | 0·69 | 2·35 | 0·62 | 0·66 | 1·25 |
| Tuberculous diseases | 1·1 | 1·3 | 1·14 | 0·91 | 0·67 | 0·54 | 0·50 | 0·83 | 0·87 |
| Lung diseases ... | 1·4 | 2·2 | 1·57 | 2·08 | 1·67 | 0·9 | 1·57 | 1·16 | 1·09 |
| Heart diseases ... | 0·9 | 0·5 | 1·14 | 1·43 | 0·89 | 0·84 | 0·90 | 0·27 | 0·54 |
| Cancer | 0·4 | 0·7 | 0·5 | 0·39 | 0·3 | 0·84 | 1·12 | 0·71 | 0·65 |
| Injuries | 0·6 | 0·1 | 0·3 | 0·26 | 0·49 | 0·3 | 0·45 | 0·27 | 0·27 |
| All other causes ... | 5·2 | 4·9 | 5·44 | 3·8 | 3·98 | 4·9 | 4·44 | 4·90 | 5·04 |

| SOHO WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 18·8 | 19·0 | 18·4 | 18·3 | 18·0 | 15·9 | 14·3 | 15·7 | 15·9 |
| Death-rate | 11·7 | 10·9 | 9·8 | 11·53 | 9·4 | 8·6 | 8·5 | 10·8 | 10·0 |
| Infantile mortality ... | 123 | 104 | 89 | 89 | 96 | 77 | 92 | 101 | 76 |
| Death-rates from— | | | | | | | | | |
| All Epidemic diseases | 1·5 | 1·3 | 0·77 | 1·90 | 0·81 | 0·82 | 0·94 | 0·60 | 0·43 |
| Tuberculous diseases | 1·0 | 0·6 | 1·03 | 0·95 | 0·81 | 0·9 | 0·54 | 0·99 | 0·64 |
| Lung diseases ... | 1·5 | 2·1 | 1·1 | 1·21 | 1·1 | 1·06 | 1·09 | 2·13 | 1·72 |
| Heart diseases ... | 1·1 | 0·6 | 0·94 | 1·73 | 1·1 | 0·41 | 0·87 | 0·53 | 0·71 |
| Cancer | 0·7 | 0·6 | 0·34 | 0·78 | 1·06 | 0·33 | 0·87 | 0·68 | 0·93 |
| Injuries | 0·2 | 0·4 | 0·5 | 0·26 | 0·3 | 0·33 | 0·31 | 0·07 | 0·21 |
| All other causes ... | 5·2 | 5·1 | 5·0 | 4·25 | 4·5 | 4·8 | 3·90 | 5·80 | 5·36 |

TABLE F.—*Notifications of Infectious Diseases.*

| Compulsory from March 1st, 1890. | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Year | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 |
| Population | 31,000 | 33,100 | 34,650 | 36,500 | 38,000 | 39,500 | 40,600 | 41,600 | 43,500 | 47,000 | 50,000 | 53,000 | 56,141 | 59,000 | 61,500 | 65,249 | 66,276 | 69,122 | 70,518 | 71,935 |
| Smallpox | ... | ... | 1 | 42 | 106 | 7 | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... |
| Scarlatina | 208 | 120 | 239 | 196 | 101 | 179 | 304 | 216 | 88 | 155 | 185 | 251 | 361 | 361 | 256 | 127 | 234 | 216 | 420 | 432 |
| Diphtheria | 50 | 19 | 20 | 15 | 19 | 28 | 98 | 46 | 29 | 50 | 50 | 59 | 55 | 43 | 55 | 32 | 57 | 76 | 95 | 88 |
| Membranous
Group | ... | 2 | ... | 1 | ... | 3 | 3 | 2 | 2 | 1 | ... | ... | 1 | 3 | 4 | 1 | 2 | 2 | ... | 5 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid | 20 | 21 | 5 | 10 | 19 | 27 | 25 | 25 | 31 | 48 | 36 | 28 | 24 | 20 | 19 | 10 | 11 | 20 | 13 | 13 |
| Continued | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | 1 | 1 | ... | ... |
| Relapsing | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal | 1 | ... | ... | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | ... | 1 |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas | 8 | 8 | 22 | 20 | 27 | 23 | 36 | 15 | 24 | 31 | 23 | 32 | 20 | 32 | 38 | 37 | 43 | 50 | 42 | 45 |
| Plague | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| *Chickenpox | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 78 | 248 | 103 | ... | ... | ... | ... | ... |
| Totals | 287 | 170 | 287 | 286 | 276 | 271 | 468 | 307 | 178 | 289 | 297 | 376 | 544 | 711 | 477 | 208 | 350 | 367 | 570 | 584 |

Chickenpox was added to the "Notifiable Diseases" in this District during the period June 1st, 1902—June 1st, 1904.

TABLE H.
Showing number of cases of disease notified per 1,000 of the population.

| Disease. | Average
5 years
1891-5. | 1896. | 1897. | 1898. | 1899. | 1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|-------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Smallpox | 0·83 | ... | ... | .. | ... | ... | ... | ... | 0·02 | 0·01 | ... | ... | ... | ... | ... |
| Scarlatina | 4·57 | 7·48 | 5·19 | 2·02 | 3·30 | 3·70 | 4·73 | 6·42 | 6·12 | 4·16 | 1·99 | 3·53 | 3·13 | 5·95 | 6·00 |
| Diphtheria | 0·53 | 2·41 | 1·13 | 0·67 | 1·06 | 1·00 | 1·11 | 0·98 | 0·73 | 0·89 | 0·49 | 0·86 | 1·10 | 1·34 | 1·23 |
| Membranous Croup | 0·03 | 0·07 | 0·04 | 0·04 | 0·02 | ... | 0·02 | 0·05 | 0·05 | 0·06 | 0·01 | 0·03 | 0·03 | ... | 0·06 |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid ,, | 0·44 | 0·61 | 0·60 | 0·71 | 1·02 | 0·72 | 0·53 | 0·42 | 0·34 | 0·31 | 0·15 | 0·16 | 0·29 | 0·18 | 0·18 |
| Continued ,, | ... | ... | 0·02 | ... | ... | ... | 0·04 | ... | ... | ... | ... | 0·01 | 0·01 | .. | ... |
| Relapsing ,, | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal ,, | 0·05 | 0·05 | 0·04 | 0·09 | 0·09 | 0·06 | 0·06 | 0·05 | 0·05 | 0·01 | 0·01 | 0·03 | 0·03 | ... | 0·01 |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas | 0·54 | 0·89 | 0·36 | 0·88 | 0·66 | 0·46 | 0·60 | 0·35 | 0·54 | 0·62 | 0·55 | 0·64 | 0·73 | 0·59 | 0·62 |
| Chickenpox | ... | ... | ... | ... | ... | ... | ... | 1·38 | 4·06 | 1·67 | ... | ... | ... | ... | ... |
| Totals | 7·00 | 11·52 | 7·38 | 4·41 | 6·15 | 5·94 | 7·09 | 9·65 | 11·91 | 7·73 | 3·18 | 5·26 | 5·32 | 8·06 | 8·11 |

TABLE J.—PERSONS.
DEATHS OF HANDSWORTH RESIDENTS IN THIRTEEN AGE-GROUPS, CLASSIFIED ACCORDING TO THE CAUSES OF DEATHS.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | |
|------------------------------------|------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and upw'ds | Total |
| Smallpox ... | ... 6 | ... 10 | ... 1 | ... | ... | ... | ... 1 | ... | ... | ... | ... | ... | ... 18 | ... |
| Measles ... | ... | 8 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... 10 | ... |
| Scarlet Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhus Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Epidemic Influenza ... | 1 | ... | ... | ... | 1 | ... | ... | 4 | 1 | 3 | 5 | 2 | ... | ... |
| Whooping Cough ... | 2 | 11 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diphtheria, Membranous Croup | 1 | 5 | 6 | ... | ... | ... | ... 1 | ... | ... | 2 | ... | ... | ... | ... |
| Enteric Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Asiatic Cholera ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diarrhoea, Dysentery ... | 8 | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... |
| Epidemic or Zymotic Enteritis ... | 3 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Epidemic Cerebro-Spinal Meningitis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hydrophobia ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Glanders, Farcy ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tetanus ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Anthrax, Splenic Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cowpox, Accidents of Vaccination | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Syphilis ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Gonorrhœa ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Phagedæna, Hospital Gangrene | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total carried forward ... | 22 | 37 | 11 | 1 | 1 | ... | 2 | 4 | 1 | 5 | 8 | 2 | ... | 94 |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | |
|--|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|-------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and up' wds | Total |
| Brought forward | 22 | 37 | 11 | 1 | 1 | ... | 2 | 4 | 1 | 5 | 8 | 2 | ... | 94 |
| Erysipelas ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Pyæmia, Septicæmia ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Septic, Ulcerative or Infective Endocarditis ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 2 |
| Cancrum Oris ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Malarial Fever ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rheumatic Fever ... | ... | ... | 3 | 3 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 7 |
| Rheumatism of the Heart ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Tuberculosis of Brain or Meninges, ... | 2 | 6 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 10 |
| Acute Hydrocephalus ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 |
| Tuberculosis of Larynx ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tuberculosis of Lungs, Phthisis, ... | ... | 1 | 1 | ... | 2 | 3 | 15 | 9 | 5 | 4 | 2 | ... | ... | 42 |
| Phthisis Pulmonalis... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tuberculosis of Intestines, Tabes ... | 1 | 5 | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 8 |
| Mesenterica ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... |
| General Tuberculosis, Tubercular ... | ... | 1 | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 3 |
| Disease of undefined position ... | ... | 1 | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | 3 |
| Other forms of Tuberculosis ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other Infective Diseases... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total carried forward | 25 | 52 | 16 | 6 | 4 | 3 | 24 | 15 | 7 | 9 | 10 | 2 | ... | 173 |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | |
|--|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and upw'ds | Total |
| Brought forward | 25 | 52 | 16 | 6 | 4 | 3 | 24 | 15 | 7 | 9 | 10 | 2 | ... | 173 |
| Thrush | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Actinomycosis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hydatid Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Scurvy | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Ptomaine Poisoning | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Acute Alcoholism, Delirium Tremens... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 |
| Chronic Alcoholism | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Chronic Industrial Poisoning | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other Chronic Poisonings | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 1 | 1 | ... | ... | 4 |
| Osteo-arthritis, Rheumatoid Arthritis... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Gout ... | ... | ... | ... | ... | ... | ... | ... | 2 | 19 | 16 | 11 | 2 | ... | 51 |
| Cancer | ... | 1 | ... | ... | ... | 2 | 1 | 1 | 1 | 1 | ... | ... | ... | 6 |
| Diabetes Mellitus ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Purpura Hæmorrhagica | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hæmophilia | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Anæmia, Leucocythæmia | ... | ... | ... | ... | ... | 1 | ... | ... | 2 | 1 | 1 | ... | ... | 5 |
| Lymphadenoma, Hodgkin's Disease | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Premature Birth | 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 21 |
| Injury at Birth | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Debility at Birth | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Total carried forward | 50 | 53 | 17 | 7 | 4 | 6 | 26 | 18 | 30 | 29 | 23 | 4 | ... | 267 |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | 85 and upw'ds | Total |
|-----------------------------|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | | |
| Brought forward | 50 | 53 | 17 | 7 | 4 | 6 | 26 | 18 | 30 | 29 | 23 | 4 | .. | 267 |
| Atelectasis .. | 6 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 6 |
| Congenital Defects | 2 | .. | .. | .. | .. | 1 | .. | .. | .. | .. | .. | .. | .. | 3 |
| Want of Breast Milk | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Atrophy, Debility, Marasmus | 13 | 2 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 15 |
| Dentition .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Want of attention at birth | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 |
| Rickets .. | .. | 5 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 5 |
| Old Age, Senile Decay | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 11 | 23 | 11 | 45 |
| Convulsions | 2 | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 3 |
| Meningitis .. | 3 | 3 | .. | .. | 1 | .. | 1 | .. | .. | .. | .. | .. | .. | 8 |
| Encephalitis | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 5 | 3 | .. | 10 |
| Apoplexy .. | .. | .. | .. | .. | .. | .. | .. | 1 | .. | 1 | 1 | .. | .. | 1 |
| Softening of Brain | .. | .. | .. | .. | .. | .. | .. | .. | 1 | .. | 2 | 1 | 1 | 5 |
| Hemiplegia, Brain Paralysis | .. | .. | .. | .. | .. | .. | 1 | 1 | .. | .. | .. | 1 | .. | 3 |
| General Paralysis of Insane | .. | .. | .. | .. | .. | 2 | 1 | 1 | 1 | .. | .. | .. | .. | 5 |
| Other Forms of Insanity... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Chorea .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Cerebral Tumour | .. | .. | 2 | .. | .. | .. | .. | 1 | .. | 2 | .. | .. | .. | 2 |
| Epilepsy .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 3 |
| Laryngismus Stridulus | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Total carried forward | 77 | 64 | 19 | 7 | 5 | 9 | 29 | 22 | 32 | 32 | 42 | 32 | 12 | 382 |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | |
|---|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and upw'ds | Total |
| Brought forward | 77 | 64 | 19 | 7 | 5 | 9 | 29 | 22 | 32 | 32 | 42 | 32 | 12 | 382 |
| Locomotor Ataxy ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Paraplegia, Diseases of Spinal Cord | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 2 | ... | 4 |
| Diabetes Insipidus | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Peripheral Neuritis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other and ill-defined Diseases of Brain or Nervous System | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Otitis, Otorrhoea | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 |
| Diseases of Nose, Epistaxis | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 |
| Diseases of Eye, Ophthalmia | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Pericarditis... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Endocarditis, Valvular Disease of the Heart | ... | ... | 1 | 1 | 1 | 1 | 1 | 5 | 1 | 2 | 6 | ... | ... | 19 |
| Angina Pectoris | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | ... | ... | ... | 2 |
| Aneurism | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | ... | 1 | ... | ... | 4 |
| Senile Gangrene | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 |
| Embolism, Thrombosis | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 2 | ... | 1 | ... | 6 |
| Phlebitis | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 |
| Varicose Veins | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Fatty Degeneration of Heart | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 2 | 1 | ... | 4 |
| Dilatation of Heart | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | 2 |
| Total carried forward | 77 | 64 | 20 | 8 | 6 | 11 | 30 | 30 | 40 | 38 | 53 | 38 | 12 | 427 |

TABLE J. — PERSONS. — *Continued.*

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | Total
upw'ds |
|--|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|-----------------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and
upw'ds | |
| Brought forward | 77 | 64 | 20 | 8 | 6 | 11 | 30 | 30 | 40 | 38 | 53 | 38 | 12 | 427 |
| Heart Disease not otherwise specified... | 1 | ... | ... | ... | 1 | 1 | 1 | 1 | 2 | 5 | 9 | 2 | ... | 23 |
| Heart Failure, Syncope | 1 | .. | ... | ... | ... | 1 | ... | ... | 1 | ... | 2 | 1 | 1 | 7 |
| Cerebral Hæmorrhage | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 7 | 12 | 3 | 4 | 28 |
| Arterial Sclerosis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 |
| Atheroma | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 2 |
| Laryngitis | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 |
| Croup | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... |
| Other Diseases of Larynx and Trachea | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Acute Bronchitis | 14 | 1 | 1 | ... | ... | ... | ... | ... | 1 | 2 | 2 | 2 | 1 | 24 |
| Chronic Bronchitis | ... | ... | ... | ... | .. | ... | ... | 1 | 4 | 8 | 7 | 12 | 4 | 36 |
| Lobar, Croupous, Acute, Pleuro-Pneumonia | 1 | ... | ... | ... | ... | ... | 4 | 2 | 3 | 3 | 3 | 2 | ... | 18 |
| Lobular, Catarrhal, Broncho-Pneumonia | 6 | 9 | ... | ... | ... | ... | 1 | ... | ... | 1 | 2 | 1 | 1 | 21 |
| Pneumonia, form not stated | 2 | ... | 1 | 1 | ... | 1 | 1 | 1 | ... | 5 | 5 | ... | ... | 17 |
| Emphysema, Asthma | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 |
| Pleurisy | .. | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 |
| Other and ill-defined Diseases of Respiratory System | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | .. | 2 |
| Diseases of Mouth and Annexa | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Total carried forward | 103 | 74 | 22 | 9 | 7 | 14 | 37 | 35 | 54 | 72 | 98 | 62 | 23 | 610 |

TABLE J. — PERSONS. — Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | |
|--|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| | 0-1 | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and upw'ds | Total |
| Brought forward | 103 | 74 | 22 | 9 | 7 | 14 | 37 | 35 | 54 | 72 | 98 | 62 | 23 | 610 |
| Diseases of Pharynx | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diseases of Oesophagus | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 2 |
| Ulcer of Stomach and Duodenum | ... | ... | ... | ... | ... | ... | ... | 3 | 1 | ... | 2 | ... | ... | 6 |
| Other Diseases of Stomach | 2 | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 1 | 1 | ... | 6 |
| Enteritis | 6 | 2 | ... | ... | ... | ... | 1 | ... | ... | 1 | 1 | 1 | ... | 12 |
| Appendicitis | ... | 1 | 3 | 1 | 2 | ... | ... | 2 | ... | ... | ... | ... | ... | 9 |
| Obstruction of Intestine... | 1 | 1 | 1 | ... | 1 | ... | ... | ... | ... | 1 | 1 | ... | ... | 6 |
| Other Diseases of Intestine | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cirrhosis of Liver | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 3 | ... | 1 | 1 | 7 |
| Other Diseases of Liver | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 1 | ... | ... | 1 | 4 |
| Peritonitis | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Other and ill-defined Diseases of Digestive System | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | 3 |
| Diseases of Lymphatic System and Ductless Glands | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | 1 | ... | ... | 3 |
| Acute Nephritis | 1 | 1 | ... | ... | 1 | ... | 1 | ... | ... | 1 | ... | ... | ... | 5 |
| Bright's Disease | ... | ... | ... | ... | ... | ... | ... | 2 | 1 | 2 | 6 | 2 | ... | 13 |
| Calculus | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diseases of Bladder and Prostate | ... | .. | ... | ... | .. | ... | ... | ... | ... | ... | 1 | 1 | ... | 2 |
| Total carried forward | 114 | 79 | 27 | 11 | 11 | 16 | 40 | 43 | 59 | 83 | 113 | 69 | 25 | 690 |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | Total |
|---------------------------------------|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and upw'ds | |
| Brought forward | 114 | 79 | 27 | 11 | 11 | 16 | 40 | 43 | 59 | 83 | 113 | 69 | 25 | 690 |
| Other and ill-defined Diseases of | | | | | | | | | | | | | | ... |
| Urinary System | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diseases of Testis and Penis .. | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... |
| Diseases of Ovaries | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Diseases of Uterus and Appendages | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 2 |
| Diseases of Vagina and External | | | | | | | | | | | | | | ... |
| Genital Organs | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diseases of the Breast | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Abortion, Miscarriage | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal Mania | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal Convulsions | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Placenta Prævia, Flooding, Accidental | | | | | | | | | | | | | | ... |
| Hæmorrhage | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal Thrombosis | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other and ill-defined Accidents and | | | | | | | | | | | | | | ... |
| Diseases of Pregnancy and Child- | | | | | | | | 1 | ... | ... | ... | ... | ... | 1 |
| birth | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Arthritis, Ostitis, Periostitis ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other and ill-defined Diseases of | | | | | | | | | | | | | | ... |
| Osseous System | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total carried forward | 114 | 79 | 27 | 11 | 12 | 17 | 40 | 44 | 60 | 83 | 113 | 70 | 25 | 695 |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | | | | | | | Total |
|--|------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| | 0-1 | 1-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75-85 | 85 and upw'ds | |
| Brought forward | 114 | 79 | 27 | 11 | 12 | 17 | 40 | 44 | 60 | 83 | 113 | 70 | 25 | 695 |
| Ulcer, Bed sore | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Eczema | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Pemphigus | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other and ill-defined Diseases of the Integumentary System | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| BY ACCIDENT OR NEGLIGENCE: | | | | | | | | | | | | | | |
| In Mines and Quarries | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| In Vehicular Traffic... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| On Railways | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| On Ships, Boats and Docks, excluding Drowning | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| In Building Operations | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| By Weapons and Implements | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Burns and Scalds | ... | 4 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... |
| Poisons, Poisonous Vapours | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 5 |
| Surgical Narcosis | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Effects of Electric Shock | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Corrosion by Chemicals | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Drowning | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Suffocation, overlaid in bed | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total carried forward | 114 | 84 | 28 | 11 | 12 | 17 | 41 | 45 | 60 | 84 | 113 | 70 | 25 | 704 |

SUMMARY OF TABLES.

Showing mortality and rates at different ages, and from different classes of disease in 1909 compared with the average rates for ten years 1899-1908.

| | Totals.
1909. | Rates per 1,000. | |
|----------------------------------|------------------|------------------|------------|
| | | 1909. | 1899-1908. |
| Deaths | 737 | 10·2 | 11·5 |
| Deaths under one year | 121 | ... | ... |
| Over one and under five | 87 | ... | ... |
| Over sixty-five | 219 | ... | ... |
| All Zymotic Diseases | 76 | 1·05 | 1·48 |
| Tubercular Diseases | 67 | 0·93 | 1·03 |
| Diseases of Lungs | 120 | 1·66 | 1·71 |
| Heart Diseases | 42 | 0·58 | 1·05 |
| Cancer, Malignant Disease | 51 | 0·70 | 0·71 |
| Injuries | 21 | 0·29 | 0·32 |
| From all other causes | 360 | 5·00 | 5·19 |

TABLE I.—*Vital Statistics of Whole District during 1909 and Previous Years.*

| YEAR. | BIRTHS. | | | | TOTAL DEATHS REGISTERED IN THE DISTRICT. | | | | NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT. | | | |
|-------------------------------|---------|-------|--------|----------------------|--|--------------|--------|--|--|--|---------|--------|
| | Number. | | Rate * | Under 1 Year of Age. | | At all Ages. | | Total Deaths in Public Institutions in the District. | Deaths of Non-residents registered in Public Institutions in the District. | Deaths of Residents registered in Public Institutions beyond the District. | Number. | Rate.* |
| | | | | Number. | Rate per 1,000 Births registered. | Number. | Rate.* | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1899. | 47,000 | 1,236 | 26.3 | 183 | 148 | 583 | 12.4 | ... | ... | 40 | 623 | 13.2 |
| 1900. | 50,000 | 1,275 | 25.5 | 179 | 140 | 586 | 11.7 | ... | ... | 46 | 632 | 12.6 |
| 1901. | 53,000 | 1,402 | 26.4 | 183 | 129 | 671 | 12.7 | ... | ... | 57 | 728 | 13.7 |
| 1902. | 56,141 | 1,392 | 24.8 | 150 | 108 | 563 | 10.2 | ... | ... | 63 | 626 | 11.1 |
| 1903. | 59,000 | 1,451 | 24.6 | 148 | 102 | 576 | 9.8 | ... | ... | 66 | 642 | 10.8 |
| 1904. | 61,500 | 1,436 | 23.4 | 192 | 133 | 670 | 10.9 | ... | ... | 84 | 754 | 12.2 |
| 1905. | 65,249 | 1,483 | 23.0 | 119 | 80 | 583 | 9.0 | 1 | 1 | 75 | 657 | 10.1 |
| 1906. | 66,276 | 1,500 | 22.6 | 181 | 120 | 663 | 10.0 | ... | ... | 77 | 740 | 11.1 |
| 1907. | 69,122 | 1,516 | 21.9 | 153 | 100 | 626 | 9.0 | ... | ... | 67 | 693 | 10.0 |
| 1908. | 70,518 | 1,570 | 22.2 | 142 | 90 | 675 | 9.5 | ... | ... | 88 | 763 | 10.8 |
| Averages for years 1899-1908. | 59,780 | 1,426 | 24.0 | 163 | 115 | 619 | 10.5 | 1 | 1 | 66 | 685 | 11.5 |
| 1909. | 71,935 | 1,446 | 20.1 | 119 | 82 | 645 | 8.9 | 0 | 0 | 92 | 737 | 10.2 |

* Rates in columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the District or Division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the District on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the District on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. The chief of these are:—The Workhouse and Infirmary, West Bromwich; Infectious Hospital, West Bromwich; Staffordshire County Asylum, Burntwood; and various Birmingham Hospitals. There are no "Public Institutions" of the kind within the District.

TABLE II.

Vital Statistics of Separate Localities in 1909 and previous years.

| Year | BIRCHFIELD WARD | | | | HEATHFIELD WARD | | | | MURDOCK WARD | | | | SANDWELL WARD | | | | SOHO WARD | | | | Deaths not distributed |
|---------------------------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|---------------------|------------------------|
| | Population
estimated to
middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population
estimated to
middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population
estimated to
middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population
estimated to
middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population
estimated to
middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | |
| 1899 | 10,154 | 302 | 130 | 40 | 8,554 | 158 | 90 | 18 | 10,406 | 376 | 184 | 69 | 9,122 | 241 | 115 | 37 | 8,764 | 159 | 104 | 18 | 4 |
| 1900 | 10,480 | 293 | 136 | 44 | 9,034 | 178 | 91 | 26 | 10,994 | 380 | 177 | 58 | 10,145 | 263 | 120 | 28 | 9,347 | 161 | 105 | 23 | 3 |
| 1901 | 10,897 | 302 | 152 | 41 | 9,230 | 182 | 110 | 24 | 11,409 | 394 | 197 | 69 | 11,421 | 316 | 135 | 32 | 10,043 | 209 | 125 | 17 | 9 |
| 1902 | 11,555 | 326 | 103 | 31 | 9,506 | 176 | 105 | 18 | 11,514 | 352 | 161 | 45 | 12,809 | 336 | 141 | 35 | 10,667 | 202 | 116 | 21 | ... |
| 1903 | 12,302 | 312 | 123 | 29 | 9,793 | 153 | 95 | 15 | 11,283 | 345 | 156 | 50 | 13,966 | 427 | 154 | 36 | 11,656 | 214 | 114 | 19 | ... |
| 1904 | 12,886 | 336 | 155 | 43 | 9,720 | 153 | 93 | 17 | 11,996 | 348 | 195 | 64 | 15,368 | 387 | 178 | 51 | 11,530 | 212 | 133 | 19 | ... |
| 1905 | 14,408 | 329 | 136 | 22 | 9,575 | 168 | 87 | 12 | 12,818 | 352 | 165 | 36 | 16,199 | 415 | 154 | 28 | 12,249 | 219 | 115 | 21 | ... |
| 1906 | 14,776 | 360 | 175 | 51 | 9,614 | 152 | 114 | 23 | 13,032 | 369 | 169 | 48 | 16,605 | 425 | 177 | 44 | 12,249 | 194 | 105 | 15 | ... |
| 1907 | 15,696 | 375 | 140 | 30 | 9,864 | 150 | 110 | 14 | 12,987 | 376 | 162 | 41 | 17,788 | 432 | 174 | 51 | 12,787 | 183 | 107 | 17 | ... |
| 1908 | 16,188 | 397 | 163 | 31 | 9,976 | 152 | 114 | 15 | 13,171 | 397 | 184 | 44 | 18,057 | 417 | 159 | 31 | 13,126 | 207 | 143 | 21 | ... |
| Averages of
years, 1899
to 1908 | 12,934 | 333 | 141 | 36 | 9,486 | 162 | 100 | 18 | 11,961 | 368 | 175 | 52 | 14,148 | 365 | 150 | 37 | 11,241 | 196 | 116 | 19 | 1 |
| 1909 | 16,777 | 339 | 149 | 29 | 9,926 | 132 | 95 | 13 | 13,014 | 333 | 176 | 34 | 18,318 | 420 | 178 | 28 | 13,900 | 222 | 139 | 17 | ... |

NOTES. — Deaths of residents occurring in public institutions beyond the District are included in sub-columns *c* of this Table, and those of non-residents registered in public institutions in the District excluded. (See note on Table I. as to meaning of terms “resident” and “non-resident.”)
Deaths of residents occurring in public institutions, whether within or without the District, are allotted to the respective localities according to the addresses of the deceased.

TABLE III.
Cases of Infectious Disease notified during the year 1909.

| NOTIFIABLE DISEASE. | CASES NOTIFIED IN WHOLE DISTRICT. | | | | | | | TOTAL CASES NOTIFIED IN EACH LOCALITY. | | | | | NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY. | | | | | Total cases removed to Hospital. |
|---|-----------------------------------|---------|--------|---------|----------|----------|----------------|--|-------------|----------|-----------|-------|--|-------------|----------|-----------|-------|----------------------------------|
| | At all Ages. | Under 1 | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 65 | 65 and upwards | Birchfield. | Heathfield. | Murdock. | Sandwell. | Soho. | Birchfield. | Heathfield. | Murdock. | Sandwell. | Soho. | |
| | | | | | | | | | | | | | | | | | | |
| Smallpox | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Cholera | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Diphtheria (including Membranous Croup) | 93 | 2 | 15 | 49 | 16 | 11 | 9 | 14 | 18 | 24 | 25 | 12 | 105 | 32 | 138 | 103 | 54 | 10 |
| Erysipelas | 45 | 1 | 2 | 2 | 8 | 23 | 9 | 6 | 6 | 14 | 9 | 10 | 23 | 3 | 51 | 28 | 10 | 115 |
| Scarlet Fever | 432 | .. | 99 | 291 | 24 | 18 | .. | 105 | 32 | 138 | 103 | 54 | 23 | 3 | 51 | 28 | 10 | 115 |
| Typhus Fever | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Enteric Fever | 13 | .. | 1 | 1 | 6 | 5 | .. | 4 | .. | 3 | 5 | 1 | .. | .. | .. | .. | .. | .. |
| Relapsing Fever | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Continued Fever | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Puerperal Fever | 1 | .. | .. | .. | 1 | .. | .. | .. | .. | .. | .. | 1 | .. | .. | .. | .. | .. | .. |
| Plague | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Totals | 584 | 3 | 117 | 343 | 55 | 57 | 9 | 129 | 56 | 179 | 142 | 78 | 23 | 3 | 51 | 28 | 10 | 115 |

Isolation Hospital—West Bromwich Borough Infectious Hospital. Total available beds, 70.
Number of Diseases that can be concurrently treated, 1.

TABLE IV.

Causes of, and Ages at, Death during year 1909.

| CAUSES OF DEATH. | DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES. | | | | | | | DEATHS IN OR BELONGING TO LOCALITIES (AT ALL AGES). | | | | | Deaths in Public Institutions in the District |
|--|---|---------------|----------------|-----------------|------------------|------------------|-----------------|---|--------------|-----------|------------|-------|---|
| | All ages. | Under 1 year. | 1 and under 5. | 5 and under 15. | 15 and under 25. | 25 and under 65. | 65 and upwards. | WARDS. | | | | | |
| | | | | | | | | Birch-field. | Heath-field. | Mur-dock. | Sand-well. | Soho. | |
| Smallpox | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 18 | 6 | 10 | 1 | ... | 1 | .. | 2 | 1 | 10 | 5 | ... | ... |
| Scarlet Fever | 10 | ... | 8 | 2 | ... | ... | ... | ... | ... | 6 | 3 | 1 | ... |
| Whooping-cough | 14 | 2 | 11 | 1 | ... | ... | ... | 1 | 1 | 8 | 3 | 1 | ... |
| Diphtheria (including Membranous Croup) | 12 | 1 | 5 | 6 | ... | ... | ... | ... | 3 | 4 | 5 | ... | .. |
| Croup | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Fever { Typhus
Enteric
Other con'd } | 3 | ... | ... | ... | ... | 3 | ... | ... | ... | 1 | 1 | 1 | ... |
| Epidemic Influenza | 17 | 1 | ... | ... | 1 | 8 | 7 | 4 | 3 | 1 | 3 | 6 | ... |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... |
| Plague | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. |
| Diarrhœa | 19 | 11 | 3 | 2 | ... | ... | 3 | 5 | ... | 5 | 6 | 3 | ... |
| Enteritis | 12 | 6 | 2 | ... | ... | 2 | 2 | 5 | 1 | 2 | 2 | 2 | ... |
| Gastritis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... |
| Phthisis (Pulmonary Tuberculosis) | 42 | ... | 1 | 1 | 5 | 33 | 2 | 10 | 4 | 12 | 8 | 8 | ... |
| Other Tuberculous Diseases | 25 | 3 | 13 | 3 | .. | 6 | ... | 7 | 3 | 6 | 8 | 1 | ... |
| Cancer, Malignant Disease | 51 | ... | 1 | ... | ... | 37 | 13 | 12 | 9 | 5 | 12 | 13 | ... |
| Bronchitis | 60 | 14 | 1 | 1 | ... | 16 | 28 | 6 | 13 | 18 | 8 | 15 | ... |
| Pneumonia | 56 | 9 | 9 | 2 | 1 | 21 | 14 | 8 | 6 | 21 | 12 | 9 | ... |
| Pleurisy | 1 | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... |
| Other Diseases of Respiratory Organs | 3 | ... | ... | ... | ... | 1 | 2 | 1 | 1 | 1 | ... | ... | ... |
| Alcoholism | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cirrhosis of Liver } | 7 | ... | ... | ... | ... | 5 | 2 | .. | 3 | 1 | 1 | 2 | ... |
| Venereal Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Premature Birth | 21 | 21 | ... | ... | ... | ... | ... | 1 | 1 | 9 | 5 | 5 | ... |
| Diseases and Accidents of Parturition | 1 | ... | ... | .. | ... | 1 | ... | ... | .. | ... | 1 | ... | ... |
| Heart Diseases | 42 | 1 | ... | 2 | 4 | 18 | 17 | 6 | 5 | 11 | 10 | 10 | ... |
| Accidents | 16 | 2 | 7 | ... | .. | 3 | 4 | 7 | 1 | 2 | 4 | 2 | .. |
| Suicides | 5 | ... | ... | ... | ... | 5 | ... | 2 | ... | 1 | 1 | 1 | ... |
| Senile Decay | 45 | ... | ... | ... | ... | ... | 45 | 9 | 5 | 14 | 8 | 9 | ... |
| All other causes | 257 | 44 | 16 | 18 | 18 | 81 | 80 | 62 | 35 | 38 | 72 | 50 | ... |
| All causes | 737 | 121 | 87 | 39 | 29 | 242 | 219 | 149 | 95 | 176 | 178 | 139 | ... |

TABLE V.—INFANTILE MORTALITY DURING THE YEAR 1909.
DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

| CAUSE OF DEATH. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---------------|-------------|------------|-----|------------|-----|------------|-----|----------------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|--------------|-----|---------------|-----|---------------|-----|------------------------------|-----|-----|
| All Causes. | Under 1 Week. | | 1-2 Weeks. | | 2-3 Weeks. | | 3-4 Weeks. | | Total under 1 Month. | | 1-2 Months. | | 2-3 Months. | | 3-4 Months. | | 4-5 Months. | | 5-6 Months. | | 6-7 Months. | | 7-8 Months. | | 8-9 Months. | | 9-10 Months. | | 10-11 Months. | | 11-12 Months. | | Total Deaths under One Year. | | |
| | Certified | Uncertified | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Common Infectious Diseases. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Diarrhoeal Diseases. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Wasting Diseases. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Total carried forward | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

TABLE V.—INFANTILE MORTALITY DURING THE YEAR 1909.—Continued.

| CAUSE OF DEATH. | | Under 1 Year. | | | | | | | | | | | | Total Deaths under One Year. | | | | |
|------------------------|---|----------------------------|------------|------------|------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------------|--------------|---------------|---------------|----|
| | | Under 1 Week. | 1-2 Weeks. | 2-3 Weeks. | 3-4 Weeks. | Total under 1 Month. | 1-2 Months. | 2-3 Months. | 3-4 Months. | 4-5 Months. | 5-6 Months. | 6-7 Months. | 7-8 Months. | 8-9 Months. | 9-10 Months. | 10-11 Months. | 11-12 Months. | |
| Tuberculous Diseases. | Brought forward | 23 | 5 | 4 | 2 | 34 | 7 | 5 | 3 | 3 | 5 | 2 | 2 | 4 | 2 | 2 | 3 | 72 |
| | { Tuberculous Meningitis
Tuberculous Peritonitis:
Tabes Mesenterica } | .. | .. | .. | .. | .. | .. | .. | .. | 1 | .. | .. | .. | .. | 1 | .. | 1 | 2 |
| | | Other Tuberculous Diseases | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| | | Erysipelas | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | .. | .. | .. |
| | Syphilis | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |
| | Rickets | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |
| | Meningitis (<i>not Tuberculous</i>) | .. | 1 | .. | .. | 1 | .. | .. | .. | .. | .. | .. | 1 | .. | 1 | .. | .. | |
| | Convulsions | .. | .. | .. | .. | .. | 1 | .. | .. | .. | .. | .. | .. | .. | 1 | .. | .. | |
| | Bronchitis | .. | 1 | 1 | .. | 2 | 1 | 1 | 1 | 1 | 2 | .. | 1 | 4 | 1 | .. | .. | |
| | Laryngitis | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | .. | |
| Pneumonia | .. | 2 | .. | .. | 2 | .. | 1 | .. | 2 | .. | .. | .. | 1 | 1 | .. | 1 | 9 | |
| Suffocation, overlying | .. | .. | 2 | .. | .. | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |
| Other Causes | .. | 1 | .. | .. | 10 | 1 | 2 | .. | .. | .. | .. | 3 | .. | .. | .. | 1 | 17 | |
| Total | 30 | 10 | 7 | 2 | 49 | 10 | 9 | 7 | 4 | 7 | 5 | 4 | 11 | 6 | 3 | 6 | 121 | |

District (or sub-division) of Handsworth (Staffs.). Population (estimated to middle of 1909), 71,935.

Births in the year:—Legitimate, 1,429; Illegitimate, 17.

Deaths in the year of Legitimate Infants, 115; Illegitimate Infants, 6. Deaths from all Causes at all Ages, 737.

TABLE VI.

PARTICULARS AS TO ACTIONS TAKEN UNDER FACTORY AND
WORKSHOPS ACT, 1901.

1.—*Number of Workshops on Register at end of 1909.*

| | | | | |
|----------------------|-----|-----|-------|-----|
| Miscellaneous trades | ... | ... | ... | 230 |
| Workshop Bakehouses | ... | ... | ... | 42 |
| | | | Total | 272 |

2.—*Inspections made.*

| | | | | |
|-----------------------|-----|-----|-----|-----|
| Number of Inspections | ... | ... | ... | 325 |
| Written Notices sent | ... | ... | ... | 67 |
| Prosecutions ... | ... | ... | ... | 0 |

3.—*Particulars of Defects found.*

| Nuisances under Public Health Acts. | Found. | Remedied. |
|-------------------------------------|--------|-----------|
| Want of Cleanliness | 31 | 28 |
| Want of Ventilation | 2 | 2 |
| Overcrowding | 1 | 1 |
| Want of Drainage of Floors | 2 | 2 |
| Other Nuisances | 25 | 21 |
| Sanitary Accommodation :— | | |
| Insufficient | 1 | 1 |
| Unsuitable | 3 | 3 |
| Not separate for sexes | 2 | 2 |
| Totals | 67 | 60 |

Five matters remediable under the Public Health Acts were
referred by H.M. Inspector.

4.—*Out-workers.*

| | | |
|--------------------------------------|-----|----|
| Number of Out-workers on list | ... | 61 |
| Inspections of Out-workers' Premises | ... | 82 |
| Premises Unwholesome or Infectious | ... | 2 |

HANDSWORTH
URBAN DISTRICT.

REPORT

ON THE

Medical Inspection of School Children under
the Education (Administrative Provisions)
Act, 1907,

FOR THE

Year ended December 31st, 1909,

BY

W. SISAM,
M.D., B.Sc., D.P.H.,
School Medical Officer.

TO THE
EDUCATION COMMITTEE OF THE URBAN
DISTRICT OF HANDSWORTH.

MR. CHAIRMAN, MRS. RABONE AND GENTLEMEN,

I beg to present to you my second Annual Report upon Medical Inspection, under the Education (Administrative Provisions) Act, 1907, of the school children in this District.

While the year's work has not revealed any striking new facts, it has emphasised the necessity for the provision of treatment for those children whose parents are unable themselves to obtain it by reason of their poverty, and it is to this aspect of Medical Inspection that I would especially direct your attention. On page 86 are detailed the results of enquiries made into a number of cases in which medical treatment was more or less urgently required. These results show a larger proportion remaining untreated at the lapse of several months after advice was first given than might have been expected in a district of this character. Inability to afford private treatment or to obtain hospital notes was at the bottom of most of the untreated cases.

At present, in addition to the verbal and written advice given to parents at the time of inspection, visits are paid by your School Nurse or myself to the homes of the worst cases, and by these means it is usually possible to secure the requisite treatment where parents are in a position to provide it; but in the poorer families great difficulty is experienced in obtaining treatment no matter how eager the parents may be.

We are fortunate in this District in having many hospitals and other charitable medical institutions within easy access, and I would respectfully suggest, as a tentative measure, the formation of a special "Children's Care Committee," to whom

the most necessitous cases would be reported, and whose function would be to form a connecting link between those cases and subscribers having hospital and dispensary notes at their disposal.

The diseases and defects which most nearly concern an Education Authority are : first, those which markedly interfere with education—such as defects of the sight and hearing ; and, secondly, those which, in addition to affecting the health of the victims, also render them an offence or a danger to their fellow scholars, *e.g.*, purulent discharges and contagious disorders of any kind. These two classes appear to have the first claim to attention.

I have again to thank your Secretary, the Head Teachers of the respective schools, the Teachers who undertook the special Medical Inspection duties and the Attendance Officers for their invaluable co-operation.

I am,

Mr. Chairman, Mrs. Rabone and Gentlemen,

Your obedient servant,

W. SISAM.

Handsworth Education Committee.

ANNUAL REPORT

of the School Medical Officer for the year 1909.

The outlines suggested in Circular 596 of the Board of Education have been followed in the main in framing this report.

CO-RELATION OF THE SCHOOL MEDICAL SERVICE WITH THE PUBLIC HEALTH SERVICE.

This is secured by the appointment of the Medical Officer of Health to the post of School Medical Officer.

GROUPS OF CHILDREN INSPECTED.

In conformity with the requirements of the Board of Education under the Education (Administrative Provisions) Act, 1907, your Committee decided that the children to be inspected during the year 1909 should be:—

(a.) Infants admitted since January 1st, 1908, who had not previously been inspected ;

(b.) Children expected to leave within a year of the date of inspection,

or briefly, “entrants” and “leavers.”

SCHEME OF MEDICAL INSPECTION.

No departure has been made from the scheme adopted last year. The following is a copy of the card used for recording the results of inspection:—

HANDSWORTH SCHOOL CARD.

| | | | | | | | |
|------------------------------|-------------------|-----|-----|-----|-----|-----|----------------------|
| NAME | SCHOOL | | | | | | VAC. MKS. |
| ADDRESS | BORN | | | | | | |
| DATE EXAMINED | ... | ... | ... | ... | ... | ... | MEASLES |
| AGE | ... | ... | ... | ... | ... | ... | WHOOPING COUGH ... |
| NUTRITION | Good, Medium, Bad | | | | | | CHICKEN POX ... |
| HEIGHT | ... | ... | ... | ... | ... | ... | DIPHTHERIA ... |
| WEIGHT | ... | ... | ... | ... | ... | ... | SCARLET FEVER ... |
| CHEST | { Inspiration ... | | | | | | MUMPS ... |
| MEASUREMENT | { Expiration ... | | | | | | |
| CLEANLINESS | { Body | | | | | | CONDITIONS. |
| | { Head ... | | | | | | |
| Clean, Medium, Dirty, Vermin | | | | | | | DEFORMITY |
| CLOTHING | { Quantity ... | | | | | | PARALYSIS... .. |
| | { Cleanliness ... | | | | | | RICKETS |
| | { Boots ... | | | | | | (GLANDULAR |
| SIGHT | ... | ... | ... | ... | ... | ... | TUBERCLE { PULMONARY |
| TEETH | { Total ... | | | | | | OSSEOUS |
| | { Decayed ... | | | | | | SKIN DISEASE |
| FATHER'S OCCUPATION | ... | | | | | | HEART DISEASE |
| HOUSE | { Bedrooms ... | | | | | | LUNG DISEASE |
| | { Living Rooms | | | | | | ANÆMIA |
| PERSONS IN HOUSE | { Over 14 | | | | | | EPILEPSY |
| | { Under 14 | | | | | | CHOREA |

| OBSERVATIONS BY MEDICAL OFFICER. | | | | |
|----------------------------------|----------------|-----|-----|-----|
| DATE OF EXAMINATION. | | | | |
| NOSE
AND
THROAT | { Articulation | ... | | |
| | Breathing | ... | | |
| | Snoring | ... | | |
| | { Tonsils | ... | | |
| | Adenoids... | ... | | |
| | Glands | ... | | |
| EARS | { Hearing | ... | | |
| | Discharge | ... | | |
| EYES | { Squint | ... | | |
| | Lids | ... | | |
| | { Conjunct. | ... | | |
| VISION | { Near | ... | | |
| | Distant | ... | | |
| MENTAL CAPACITY | | | | |
| Normal, Backward, Defective | | | | |
| NOTICES ISSUED | ... | ... | ... | ... |

ASSISTANCE BY TEACHERS.

In each school department an Assistant Teacher was nominated by the Head Teacher to help in the work of inspection—selection being based upon special aptitude and liking for the work. Your Committee decided to grant these teachers an honorarium of 25/- per 100 children examined, with a maximum annual payment of £5 to any one teacher. The principal duties allotted to them were to weigh and measure, to carry out preliminary sight testing, to collect information as to the home conditions of the children and the infectious diseases from which they had suffered, to note the cleanliness of the children and the condition of their clothing, and also to assist at the actual medical inspection.

The teachers' share in inspection has been extremely well done on the whole and it does not appear to have been found burdensome. The medical inspections have been so arranged as to enable the teachers to spread this work over a considerable period, consequently very little interference with ordinary school work has been involved.

THE SCHOOL NURSE.

In May, 1909, your Committee decided to unite with the Health Committee in a joint appointment of Health Visitor and School Nurse, and this decision receiving the confirmation of the District Council and the sanction of the Board of Education, Miss Georgina Thompson was appointed to the combined post in the following month.

In her capacity of School Nurse, Miss Thompson has occasionally assisted at inspections, but has devoted most of her time to visiting the homes of children found on inspection to be diseased, defective or dirty, for the purpose of urging the necessity of appropriate treatment upon the parents.

PARENTS AND INSPECTION.

Although in all cases invitations to be present at the inspections have been despatched to the parents concerned, the attendance has not been so good as might be desired.

The parents attended in the case of 62 per cent. of the infants and of 14 per cent. of the older children as against 58 and 20 per cent. respectively in 1908.

Messages from parents asking that their children should be exempted from inspection were received in three instances, and no examination of these children was made. In a few cases children were absent on the day of inspection without apparent cause, and it seemed probable that they were kept away in order to escape inspection. Most of these children were subsequently examined.

With these exceptions, no opposition on the part of parents has been met with; while appreciation of the objects of inspection has been shown by many.

SCHOOLS INSPECTED.

The District of Handsworth contains 12 Elementary Schools comprising 28 departments, with an average number for the year 1909 of 8,885 scholars on the roll.

The Provided Schools are :—

| | |
|---|-------|
| Boulton Road, average No. on roll, 1909 ... | 745 |
| Birchfield Road „ „ „ ... | 959 |
| Wattville Street „ „ „ ... | 1,382 |
| Rookery Road „ „ „ ... | 1,557 |
| Grove Lane „ „ „ ... | 1,007 |
| Westminster Road „ „ „ ... | 678 |
| Canterbury Road „ „ „ ... | 680 |

The Non-Provided Schools are :—

| | |
|--|-----|
| St. James' average No. on roll, 1909 ... | 586 |
| St. Michael's „ „ „ ... | 428 |
| St. Mary's „ „ „ ... | 315 |
| Holy Trinity „ „ „ ... | 339 |
| St. Augustine's „ „ „ ... | 209 |

All of these were inspected during the year. A total of 2,278 children were examined, 1,459 “entrants” and 819 “leavers.” The former varied in age between $4\frac{1}{2}$ * and 7 years and the latter between 12 and 14.

* The usual minimum age for admission is 5 years, but in exceptional cases children of $4\frac{1}{2}$ are admitted.

Inspection was completed in 72 visits, each occupying one school session.

The time spent in actual medical inspection averaged just under five minutes per child; but this does not take into account the subsequent examination of referred cases, many of which were visited at their homes.

FACILITIES FOR INSPECTION.

In 14 of the 26 departments dealt with, the teachers' private room was placed at the disposal of the Medical Officer for inspection purposes. This answered admirably, for, being cut off from the main school by corridors in each case, no disturbance was occasioned and no interference with the ordinary school work of any but the scholars actually examined. In the remaining departments class rooms were used for the purpose and some interference with school work occurred by reason of the disturbance caused by children entering and leaving the examination room.

SANITATION.

All serious sanitary defects were reported in detail to the Sites and Buildings Sub-Committee immediately on detection.

Ventilation and Warming.—Four of the schools—Grove Lane, Rookery Road, Wattville Road and Westminster Road—are heated and ventilated on the Plenum system; the remaining schools are naturally ventilated and are heated by either open fires or low pressure hot-water systems. In all schools ventilation is fairly good and heating satisfactory—the defects in the heating apparatus at Wattville Road, reported on last year, having been effectually remedied.

Lighting.—The only defects in lighting are those in Boulton Road School reported upon last year.

Sanitary Conveniences.—Several structural defects, mostly of a minor character, have been met with and reported to your Committee, but speaking generally the sanitary conveniences

are of good type and kept in good condition. There is insufficient accommodation in the Boulton Road Boys' Department and in the Rookery Road Junior Department, and further provision will shortly be made.

Washing and Drinking Arrangements.—The public water supply is laid on to all the schools and a sufficient number of wash basins is provided in most departments.

Cloakroom Accommodation.—A sufficient number of pegs is provided in all departments. In all the schools the pegs are arranged in tiers, an arrangement which entails overlapping of garments and economises space at the expense of cleanliness. Excepting in a few departments where each child has a peg reserved by number or by name, the pegs are used indiscriminately—a practice which should be avoided where possible.

No special arrangements for drying cloaks and boots exist in any of the schools. In the Infants' Departments the fire in the "babies' class room" is made use of for this purpose, but only a small number of garments can be thus dealt with.

Cleanliness of Schoolrooms and Cloakrooms.—In the case of two schools the walls were found to be dirty. Reports to that effect were presented to your Committee, and it is understood that these schools will be thoroughly cleansed and painted. The condition of the other schools was satisfactory.

Playgrounds.—The asphalte surfaces of three playgrounds were badly worn. It is important that the asphalte should be kept in good condition; holes and rough places are apt to cause falls, and the injuries thus produced are usually very slow to heal on account of the grit which becomes embedded in the wounds.

HEIGHT AND WEIGHT OF CHILDREN.

Weighing and measuring has not been confined to the children medically inspected, but has been extended, as far as practicable, to all in the schools.

The following table shows the average height and weight, at different ages and for each sex, of children attending the schools in the District ; while the standards set up in 1885 by the Anthropological Committee of the British Association are inserted for purposes of comparison.

As in 1908 it will be seen that while the Handsworth children, generally speaking, reach or exceed the standard height at the respective ages, they fall below the standard weight.

As compared with the 1908 results there is a slight increase in the average weight at nearly every age.

TABLE A.—MALES.

| Age | HANDSWORTH SCHOOL CHILDREN. | | | STANDARDS OF ANTHROPOLOGICAL SOCIETY. | |
|----------|-----------------------------|-------------------|----------------|---------------------------------------|----------------|
| | No. of Children Examined. | Height in inches. | Weight in lbs. | Height in inches. | Weight in lbs. |
| 4 | 82 | 38·81 | 35·44 | — | — |
| 5 | 327 | 41·02 | 38·00 | 41·03 | 39·9 |
| 6 | 203 | 40·55 | 44·25 | 44·00 | 44·4 |
| 7 | 297 | 45·13 | 45·53 | 45·97 | 49·7 |
| 8 | 223 | 47·73 | 49·96 | 47·05 | 54·9 |
| 9 | 208 | 50·00 | 55·91 | 49·70 | 60·4 |
| 10 | 290 | 52·11 | 58·09 | 51·84 | 67·5 |
| 11 | 319 | 53·37 | 66·11 | 53·50 | 72·0 |
| 12 | 323 | 55·13 | 70·36 | 54·99 | 76·7 |
| 13 | 455 | 56·52 | 81·22 | 56·91 | 82·6 |
| 14 | 23 | 58·27 | 83·19 | 59·33 | 92·0 |
| FEMALES. | | | | | |
| 4 | 62 | 39·31 | 35·00 | — | — |
| 5 | 336 | 40·83 | 38·45 | 40·55 | 39·2 |
| 6 | 207 | 37·99 | 41·09 | 42·88 | 41·7 |
| 7 | 317 | 44·15 | 44·55 | 44·45 | 47·5 |
| 8 | 248 | 46·66 | 49·74 | 46·60 | 52·1 |
| 9 | 220 | 49·66 | 53·59 | 48·73 | 55·5 |
| 10 | 270 | 54·93 | 59·03 | 51·05 | 62·0 |
| 11 | 315 | 51·72 | 65·75 | 53·10 | 68·1 |
| 12 | 324 | 55·41 | 72·03 | 55·66 | 76·4 |
| 13 | 355 | 57·99 | 79·14 | 57·77 | 87·2 |
| 14 | 37 | 59·37 | 87·78 | 59·80 | 96·7 |

NOTE.—Children whose age is given as 4 were in all cases at least $4\frac{1}{2}$, as that is the minimum age for admission in this District.

The following table shows the foregoing averages converted into metric weights and measures.

TABLE A 1.—MALES.

| Age. | HANDSWORTH SCHOOL CHILDREN. | | | STANDARDS OF ANTHROPOLOGICAL SOCIETY. | |
|----------|-----------------------------|------------------------|----------------------|---------------------------------------|----------------------|
| | No. of Children Examined. | Height in centimetres. | Weight in kilograms. | Height in centimetres. | Weight in kilograms. |
| 4 | 82 | 98·57 | 16·07 | — | — |
| 5 | 327 | 104·19 | 17·23 | 104·21 | 18·09 |
| 6 | 203 | 102·99 | 20·07 | 111·76 | 20·18 |
| 7 | 297 | 114·63 | 20·65 | 116·76 | 22·50 |
| 8 | 223 | 121·23 | 22·66 | 119·50 | 24·90 |
| 9 | 208 | 127·00 | 25·36 | 126·23 | 27·39 |
| 10 | 290 | 132·35 | 26·34 | 131·67 | 30·61 |
| 11 | 319 | 135·55 | 29·98 | 135·89 | 32·65 |
| 12 | 323 | 140·03 | 31·91 | 139·67 | 34·79 |
| 13 | 455 | 143·56 | 36·84 | 144·55 | 37·46 |
| 14 | 23 | 148·00 | 37·73 | 150·69 | 41·73 |
| FEMALES. | | | | | |
| 4 | 62 | 99·84 | 15·87 | — | — |
| 5 | 336 | 103·70 | 17·44 | 102·99 | 17·78 |
| 6 | 207 | 96·49 | 18·63 | 108·91 | 18·91 |
| 7 | 317 | 112·14 | 20·20 | 112·90 | 21·54 |
| 8 | 248 | 118·51 | 22·56 | 118·36 | 23·63 |
| 9 | 220 | 126·13 | 24·30 | 123·77 | 25·17 |
| 10 | 270 | 139·52 | 26·77 | 129·66 | 28·11 |
| 11 | 315 | 131·36 | 29·82 | 134·87 | 30·89 |
| 12 | 324 | 140·74 | 32·67 | 141·37 | 34·65 |
| 13 | 355 | 147·29 | 35·89 | 146·73 | 39·55 |
| 14 | 37 | 145·79 | 39·81 | 151·89 | 43·86 |

Tables "C" and "D" show the principal diseases and defects found on inspection, classified according to age and sex.

TABLE C.—DISEASES AND DEFECTS CLASSIFIED ACCORDING TO AGE AND SEX.

| Age of children ... | Sex | 4 | | 5 | | 6 | | 7 | | 12 | | 13 | | 14 | | All ages. | |
|---|-----|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|---------|
| | | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total number of children examined | ... | 70 | 61 | 352 | 338 | 221 | 247 | 83 | 87 | 34 | 12 | 391 | 363 | 11 | 8 | 1162 | 1116 |
| Number accompanied by parents | ... | 42 | 38 | 210 | 210 | 149 | 162 | 40 | 52 | 8 | 4 | 39 | 72 | 1 | 3 | 489 | 541 |
| No disease or defect found | ... | 16 | 14 | 28 | 28 | 13 | 13 | 3 | 4 | 2 | 1 | 12 | 13 | ... | ... | 74 | 73 |
| No disease or defect found other than decayed teeth | ... | 21 | 22 | 144 | 139 | 88 | 99 | 29 | 22 | 14 | 4 | 166 | 125 | 5 | 4 | 467 | 415 |
| Badly nourished... | ... | 1 | 4 | 33 | 30 | 35 | 21 | 19 | 19 | 8 | 1 | 41 | 39 | 2 | 1 | 139 | 115 |
| Very badly nourished | ... | ... | ... | ... | ... | 2 | ... | 1 | 1 | ... | ... | 2 | 3 | ... | ... | 5 | 4 |
| Body dirty | ... | 4 | 5 | 20 | 15 | 14 | 17 | 8 | 5 | 2 | 1 | 39 | 33 | ... | ... | 87 | 76 |
| Head verminous... | ... | 4 | 11 | 15 | 62 | 11 | 39 | 3 | 24 | 10 | 2 | 18 | 101 | ... | 1 | 61 | 240 |
| Clothing insufficient | ... | 1 | 1 | 9 | 11 | 8 | 10 | 5 | 6 | ... | ... | 24 | 25 | ... | ... | 47 | 53 |
| Clothing dirty | ... | 5 | 4 | 25 | 18 | 22 | 22 | 8 | 12 | 2 | ... | 42 | 38 | ... | ... | 104 | 94 |
| Roots defective | ... | 8 | 5 | 37 | 33 | 22 | 21 | 7 | 14 | 6 | ... | 43 | 36 | 1 | ... | 124 | 109 |
| Decayed teeth, four or less | ... | 31 | 24 | 180 | 163 | 109 | 114 | 36 | 39 | 24 | 8 | 292 | 266 | 7 | 6 | 679 | 620 |
| Do. more than four | ... | 13 | 15 | 104 | 112 | 81 | 107 | 32 | 41 | 6 | 3 | 65 | 59 | 3 | 2 | 304 | 339 |
| Septic condition of mouth | ... | ... | 1 | 2 | 6 | 1 | 1 | ... | 2 | ... | ... | 3 | ... | 1 | ... | 7 | 10 |
| Enlarged tonsils without pronounced adenoids | ... | 10 | 9 | 49 | 44 | 28 | 36 | 6 | 11 | 3 | 1 | 29 | 34 | 1 | 1 | 126 | 136 |
| Enlarged tonsils with adenoids | ... | 3 | 3 | 25 | 20 | 13 | 24 | 6 | 9 | 2 | 1 | 13 | 6 | ... | ... | 62 | 63 |
| Adenoids alone | ... | ... | ... | 2 | 1 | 5 | 4 | 3 | ... | 2 | 1 | 2 | 3 | 1 | ... | 15 | 9 |
| Tonsils and adenoids previously operated upon | ... | 1 | 2 | 7 | 10 | 9 | 7 | 5 | 2 | 1 | ... | 12 | 12 | ... | 1 | 35 | 34 |
| Enlarged submaxillary and cervical glands | ... | 3 | 5 | 30 | 22 | 17 | 14 | 10 | 4 | 1 | 1 | 15 | 14 | ... | 1 | 76 | 61 |
| External eye disease | ... | 1 | 1 | 3 | 5 | 4 | 4 | 1 | 1 | 1 | ... | 6 | 7 | ... | ... | 16 | 18 |
| Number of children tested for visual defects | ... | ... | ... | 2 | ... | 44 | 54 | 12 | 19 | 33 | 12 | 382 | 363 | 11 | 8 | 484 | 456 |
| Number visually defective (vision 6/12 or less Snellen's types) | ... | ... | ... | ... | ... | 1 | 8 | 2 | 5 | 6 | 5 | 57 | 70 | 1 | 3 | 67 | 91 |

TABLE C.—DISEASES AND DEFECTS CLASSIFIED ACCORDING TO AGE AND SEX.—Continued.

| Age of children ... | ... | ... | ... | 4 | | 5 | | 6 | | 7 | | 12 | | 13 | | 14 | | All ages. | |
|---|-----|-----|-----|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|---------|
| | | | | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| Sex | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Squint | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Discharge from ear | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hearing markedly defective | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Defective articulation (exclusive of infantile defects) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Very backward | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mentally defective | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Heart functionally disordered, evidence of organic disease | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Organic disease of heart | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Lung disease (non-tuberculous) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Disease of nervous system | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tuberculosis of lung | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Do. glands | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Do. bones | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rickets | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Pigeon chest (non-ricketty type) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Spinal curvature | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other deformity | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Non-contagious skin disease | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Ringworm | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other contagious skin disease | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Infectious disease | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Excluded from school as physically unfit | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Excluded from school on account of contagious or infectious disease | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Advice given to parents | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

TABLE D.—DISEASES AND DEFECTS CLASSIFIED IN TWO AGE-GROUPS AND EXPRESSED AS PERCENTAGES.

| Age of children | | 4-7 | | | 12-14 | | | All ages. | | |
|--|-----|-------|---------|-------------|-------|---------|-------------|-----------|---------|-------------|
| Sex | ... | Male. | Female. | Both sexes. | Male. | Female. | Both sexes. | Male. | Female. | Both sexes. |
| Total number of children examined | ... | 726 | 733 | 1459 | 436 | 383 | 819 | 1162 | 1116 | 2278 |
| PERCENTAGES. | | | | | | | | | | |
| Accompanied by parents | ... | 60.7 | 63.0 | 61.9 | 11.0 | 20.6 | 14.2 | 42.0 | 48.4 | 45.2 |
| No disease or defect found | ... | 8.2 | 9.0 | 8.1 | 3.2 | 3.6 | 3.4 | 6.3 | 6.5 | 6.4 |
| No disease or defect found other than decayed teeth | ... | 38.8 | 38.4 | 38.6 | 42.4 | 34.7 | 38.8 | 40.1 | 37.1 | 38.7 |
| Badly nourished... | ... | 12.1 | 10.0 | 11.1 | 11.6 | 10.7 | 11.1 | 11.9 | 10.3 | 11.1 |
| Very badly nourished | ... | 0.4 | 0.1 | 0.2 | 0.4 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 |
| Body dirty | ... | 6.3 | 5.7 | 6.0 | 9.4 | 8.8 | 9.1 | 7.4 | 6.8 | 7.1 |
| Head verminous... | ... | 4.5 | 18.5 | 11.5 | 6.4 | 27.1 | 16.1 | 5.2 | 21.5 | 13.2 |
| Clothing insufficient | ... | 3.1 | 3.8 | 3.4 | 5.5 | 6.5 | 6.9 | 4.0 | 4.7 | 4.3 |
| Clothing dirty | ... | 8.2 | 7.6 | 7.9 | 10.0 | 9.9 | 10.0 | 8.9 | 8.4 | 8.6 |
| Boots defective | ... | 10.1 | 9.9 | 10.0 | 11.4 | 9.3 | 10.5 | 10.6 | 9.7 | 10.2 |
| Decayed teeth, four or less | ... | 49.0 | 46.3 | 47.7 | 74.0 | 73.1 | 73.6 | 58.4 | 55.5 | 57.0 |
| Do. more than four | ... | 31.6 | 37.5 | 34.6 | 16.9 | 16.7 | 16.8 | 26.1 | 30.3 | 28.2 |
| Septic condition of mouth | ... | 0.4 | 1.3 | 0.8 | 0.9 | ... | ... | 0.6 | 0.8 | 0.7 |
| Enlarged tonsils without pronounced adenoids | ... | 12.8 | 13.6 | 13.2 | 7.5 | 9.3 | 8.4 | 10.8 | 12.1 | 11.5 |
| Enlarged tonsils with adenoids | ... | 6.4 | 7.6 | 7.0 | 3.4 | 1.8 | 2.6 | 5.3 | 5.6 | 5.4 |
| Adenoids alone | ... | 1.3 | 0.6 | 1.0 | 1.1 | 1.0 | 1.0 | 1.2 | 0.8 | 1.0 |
| Tonsils and adenoids previously operated upon | ... | 3.0 | 2.8 | 2.9 | 2.9 | 3.3 | 3.1 | 3.0 | 3.0 | 3.0 |
| Enlarged submaxillary and cervical glands | ... | 8.2 | 6.1 | 7.1 | 3.8 | 4.1 | 3.9 | 6.5 | 5.4 | 6.0 |
| External eye disease | ... | 1.2 | 1.5 | 1.3 | 1.6 | 1.8 | 1.7 | 1.3 | 1.6 | 1.4 |
| Visually defective (vision 6/12 or less Snellen's types) | ... | 5.1 | 17.8 | 12.2 | 15.0 | 20.3 | 17.5 | 13.8 | 19.9 | 16.8 |

TABLE D.—DISEASES AND DEFECTS CLASSIFIED IN TWO AGE-GROUPS AND EXPRESSED AS PERCENTAGES.—Continued.

| Age of children ... | Sex | 4-7 | | | 12-14 | | | All ages. | | | |
|---|-----|-------|---------|-------------|-------|---------|-------------|-----------|---------|-------------|--|
| | | Male. | Female. | Both sexes. | Male. | Female. | Both sexes. | Male. | Female. | Both sexes. | |
| PERCENTAGES. | | | | | | | | | | | |
| Squint ... | ... | 1.7 | 0.6 | 1.2 | 0.6 | 0.2 | 0.4 | 1.3 | 0.5 | 0.9 | |
| Discharge from ear ... | ... | 0.9 | 0.6 | 0.8 | 0.4 | 2.0 | 1.2 | 0.7 | 1.1 | 0.9 | |
| Hearing markedly defective ... | ... | 1.5 | 1.5 | 1.5 | 4.1 | 2.0 | 3.1 | 2.4 | 1.7 | 2.1 | |
| Defective articulation (exclusive of infantile defects) ... | ... | 1.6 | 1.0 | 1.3 | 2.0 | 1.0 | 1.5 | 1.8 | 1.0 | 1.4 | |
| Very backward ... | ... | 0.4 | 0.4 | 0.4 | 3.4 | 1.0 | 2.3 | 1.5 | 0.6 | 1.0 | |
| Mentally defective ... | ... | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | |
| Heart functionally disordered, no evidence of organic disease ... | ... | 1.1 | 1.1 | 1.1 | 1.8 | 2.0 | 1.9 | 1.3 | 1.5 | 1.4 | |
| Organic disease of heart ... | ... | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | |
| Lung disease (non-tuberculous) ... | ... | 2.8 | 3.4 | 3.1 | 0.6 | ... | 0.3 | 2.0 | 2.2 | 2.1 | |
| Disease of nervous system ... | ... | 0.2 | 0.1 | 0.2 | ... | ... | ... | 0.1 | 0.08 | 0.1 | |
| Tuberculosis of lung ... | ... | ... | 0.1 | 0.06 | 0.2 | ... | 0.1 | 0.08 | 0.08 | 0.08 | |
| Do. glands ... | ... | 0.2 | 0.1 | 0.2 | ... | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | |
| Do. bones ... | ... | 0.1 | ... | 0.06 | ... | ... | ... | 0.08 | ... | 0.04 | |
| Rickets ... | ... | 0.2 | 0.4 | 0.3 | ... | ... | ... | 0.1 | 0.2 | 0.2 | |
| Pigeon chest (non-ricketty type) .. | .. | 1.5 | 0.4 | 0.9 | 1.8 | 0.2 | 1.0 | 1.6 | 0.3 | 1.0 | |
| Spinal curvature ... | ... | 0.1 | 0.1 | 0.1 | ... | 1.3 | 0.6 | 0.08 | 0.5 | 0.3 | |
| Other deformity ... | ... | 1.6 | 0.8 | 1.2 | 1.3 | 1.0 | 1.2 | 1.5 | 0.8 | 1.2 | |
| Non-contagious skin disease .. | ... | 1.7 | 1.3 | 1.5 | 1.8 | 1.0 | 1.3 | 1.8 | 1.2 | 1.5 | |
| Ringworm ... | ... | 0.4 | ... | 0.2 | ... | 0.2 | 0.1 | 0.2 | 0.08 | 0.1 | |
| Other contagious skin disease ... | ... | 0.2 | ... | 0.1 | ... | ... | ... | 0.1 | ... | 0.08 | |
| Infectious disease ... | ... | 0.5 | 0.5 | 0.5 | ... | 0.5 | 0.2 | 0.3 | 0.5 | 0.4 | |
| Excluded from school as physically unfit | ... | 0.6 | 0.5 | 0.6 | ... | ... | ... | 0.4 | 0.3 | 0.3 | |
| Excluded from school on account of contagious or infectious disease ... | ... | 1.2 | 0.5 | 0.8 | ... | 0.7 | 0.3 | 0.7 | 0.6 | 0.7 | |

FURTHER PARTICULARS OF DISEASES AND DEFECTS.

Nutrition.—In regard to nutrition, children are divided into three classes: (1) *Satisfactory*; (2) *Baaly nourished*; and (3) *Very badly nourished*.

There does not appear to be any practical advantage to be gained by subdividing any of these classes.

It is a noteworthy fact that the poorest and most neglected children frequently fall into the first category. Many with ragged, filthy clothing and dirty bodies, and wearing the characteristic expression of those accustomed to abuse and blows, are both fat and robust—possibly examples of the “survival of the fittest.”

Verminous Heads.—The condition of the head is noted by the teachers when weighing and measuring is done, as well as by the Medical Officer at the time of inspection. There is a two-fold advantage in this arrangement: it accustoms the teachers to the necessary, though unpleasant, duty of detecting uncleanness, and it places on record the usual condition of the children instead of the condition in which they are presented on the day of inspection, of which parents have received about a week's warning.

Clothing.—The condition of the clothing is also recorded by the teachers, and the same remarks apply as in the case of verminous heads. There is little doubt that to many children the day of inspection means the most thorough washing and the cleanest clothing they have known for months.

Boots.—It is perhaps hardly out of place to mention here that a properly organised boot-fund has been established in connection with all the schools of the District, and that during the year 525 pairs of boots have been distributed.

Teeth.—The proportion of children possessing decayed teeth was found to be slightly greater than in 1908. It is almost useless to attempt to persuade parents to attend to this

condition; they regard it as a natural process rather than a disease and are incredulous as to its evil potentialities.

Enlarged Tonsils and Adenoids.—As a general rule the parents have now learned to appreciate the gravity of this condition, and although a surgical operation is usually involved, there is less difficulty in persuading parents to submit their children to treatment than in the case of most diseases and defects. Table “D” shows that 3 per cent. of the children inspected had previously been operated upon for enlarged Tonsils with Adenoids—a large proportion of these cases had been dealt with on the advice of the Medical Officer, to whom the children had been referred by the teachers before they became due for routine inspection—while enquiry showed that 37 per cent. of cases detected on inspection subsequently received appropriate treatment (see page 86). In many cases treatment has been followed by marked physical and mental improvement. The breathing exercises now instituted in the schools are of great value in the prevention of Adenoids and also in breaking the habit of mouth-breathing in those children who have been operated upon for this condition, a habit which is apt to persist after the nasal passages have been cleared and which tends to nullify the good effect of operation.

Defective Sight.—The preliminary testing of sight is carried out by the teachers, who have been thoroughly instructed in the use of Snellen’s test-types. Each eye is tested separately. All children who fail to reach the normal standard are re-examined by the Medical Officer at the time of inspection. The use of letter tests is impracticable in the case of many of the infants, and it is proposed shortly to adopt the “broken-ring” method for these. The teachers do not confine their tests to children due for inspection, but apply them to all others who show signs of visual defect; many serious cases are thus detected and relieved apart from those discovered by routine inspection.

Functionally Disordered Heart.—Under this heading are classed cases of irregular action of the heart unassociated with signs of organic disease. In a number of cases a history of antecedent sore throat, probably Diphtheria, was elicited, and there is little doubt that the poison of this or other infectious disease is responsible for most cases.

Organic Heart Disease.—In 3 of the 12 cases found the existence of disease was quite unsuspected by the parents, and in 1 case the child habitually indulged in swimming and other sports most unsuited to his condition. In all cases the parents were interviewed and appropriately advised.

Lung Disease (Non-Tuberculous).—All 49 cases were Bronchitis, principally of a sub-acute type. In most instances temporary exclusion from school was advised.

Tuberculosis.—The school children of the District appear to be remarkably free from Tuberculosis and especially from Tuberculosis of the Lungs. Two children showing signs and symptoms suggestive of the latter disease were found during routine inspection, and 3 others were found among children who were not due for inspection but were specially submitted by the teachers for examination. All were excluded from school for periods varying from three to twelve months and appropriate advice was given to the parents. At the expiration of the periods of exclusion re-examination showed that 3 of the children had lost all physical signs of disease and had greatly improved in general health, 1 child had left the District and could not be traced, while the remaining 1 was still under medical treatment. By the courtesy of the hospital physician under whom the last case was placed, it was learned that the disease was for a time thought to be tuberculous, but special tests negatived this opinion. In this case also complete recovery eventually took place. Diagnosis of Tuberculosis of the Lung in children is notoriously difficult—a fact well illustrated by the astonishing diversity in the proportion of children reported as affected with this disease by different medical inspectors working in districts

of similar character—and it is probable that of the 4 cases which were kept under observation none was tuberculous. It appears best to exclude all suspicious cases from school so long as physical signs or suggestive symptoms exist.

It is interesting to note that during the past five years only 3 deaths from Tuberculosis of the Lung in children of school age have been registered in the District.

Rickets.—The District is comparatively free from this disease also. Only 1 of the 5 cases noted showed marked deformity.

Ringworm.—The number of cases of Ringworm found during routine inspection does not fairly represent the prevalence of the disease, for most of the cases had been previously weeded out. Further reference to Ringworm will be found on page 91.

Infectious Disease.—These comprised Chicken Pox, 2 cases; suspected Diphtheria, 4 cases; Scarlet Fever, 2 cases; Otorrhœa after Scarlet Fever, 1 case, and Measles, 1 case.

ADVICE TO PARENTS.

Advice was given for the following diseases and defects:—

| | | | | |
|----------------------------------|-----|-----|-----|------------|
| Tonsils and Adenoids ... | ... | ... | ... | 174 cases. |
| Carious Teeth ... | ... | ... | ... | 437 „ |
| Defective Sight ... | ... | ... | ... | 101 „ |
| Disease of Eyes ... | ... | ... | ... | 12 „ |
| Bronchitis ... | ... | ... | ... | 22 „ |
| Discharge from Ear ... | ... | ... | ... | 12 „ |
| Deformities ... | ... | ... | ... | 3 „ |
| Heart Disease ... | ... | ... | ... | 6 „ |
| Infectious Disease ... | ... | ... | ... | 10 „ |
| Pediculosis ... | ... | ... | ... | 25 „ |
| Clothing dirty and defective ... | ... | ... | ... | 19 „ |
| Miscellaneous ... | ... | ... | ... | 17 „ |

RESULTS OF ADVICE.

Enquiry was made, at the lapse of not less than three months from the time of inspection, into 327 cases urgently requiring treatment. The following tables show the results :—

“ENTRANTS.”

| Conditions for which treatment was advised. | Total No. of cases. | RESULTS OF ADVICE. | | |
|---|---------------------|--------------------|---------------|----------------------------|
| | | Treated. | Nothing done. | Left, could not be traced. |
| Defective Sight | 32 | 17 | 11 | 4 |
| Enlarged Tonsils and Adenoids ... | 124 | 44 | 68 | 12 |
| Defective Teeth | 11 | 3 | 6 | 2 |
| Discharging Ears | 5 | 1 | 2 | 2 |
| Miscellaneous | 10 | 7 | 3 | — |
| Totals | 182 | 72 | 90 | 20 |

“LEAVERS.”

| Conditions for which treatment was advised. | Total No. of cases. | RESULTS OF ADVICE. | | |
|---|---------------------|--------------------|---------------|----------------------------|
| | | Treated. | Nothing done. | Left, could not be traced. |
| Defective Sight | 69 | 32 | 31 | 6 |
| Enlarged Tonsils and Adenoids ... | 51 | 22 | 17 | 12 |
| Defective Teeth | 18 | 5 | 5 | 8 |
| Discharging Ears | 5 | 2 | 3 | — |
| Miscellaneous | 2 | 1 | — | 1 |
| Totals | 145 | 62 | 56 | 27 |

In many of the untreated cases the parents had unsuccessfully tried to get hospital notes.

EXCEPTIONAL CASES.

Exceptional-case cards of a distinctive colour were made out for the following cases in order that they should be kept under observation and re-examined during subsequent visits to the respective schools :—

| | | | | | |
|-----------------------------|-----|-----|-----|-----|---|
| Heart Disease | ... | ... | ... | ... | 5 |
| Bronchitis and Asthma | ... | ... | ... | ... | 1 |
| Broncho-Pneumonia | ... | ... | ... | ... | 1 |
| Mentally Defective | ... | ... | ... | ... | 3 |
| Tuberculosis (Routine) | ... | ... | ... | ... | 2 |
| „ (Not Routine) | ... | ... | ... | ... | 3 |
| Adenoids | ... | ... | ... | ... | 3 |
| Articulation very defective | ... | ... | ... | ... | 1 |
| Very defective Sight | ... | ... | ... | ... | 1 |
| Anæmia, etc. | ... | ... | ... | ... | 1 |
| Genu Valgum | ... | ... | ... | ... | 1 |

ACTION TAKEN TO DETECT AND PREVENT THE SPREAD OF INFECTIOUS AND CONTAGIOUS DISEASES.

A system of medical inspection of school children, instituted in 1906, has been continued as an auxiliary to routine inspection under the 1907 Act, and it will be seen that it serves to fill many of the gaps left by the latter system, as well as providing for the detection of diseases of an infective nature. Briefly the scheme is as follows :—

- (1) Teachers are supplied with stamped addressed post cards for the purpose of notifying the Medical Officer of any children in school who appear to require examination at once. The Medical Officer visits the school and examines such children as soon after the receipt of notification as practicable.

- (2) Another form of card is supplied to the teachers upon which they may immediately notify the Medical Officer of the fact that they have sent home from school any child whom they suspect to be suffering from any infectious or contagious disease or condition. The Attendance Officers also report to the Medical Officer all cases of suspected infectious illness brought to their notice.

All such cases, not medically attended, are either visited at their homes or seen at the Council House, according to their nature.

This system has proved very valuable in enabling "missed cases" of infectious disease to be detected.

The following figures show the nature and extent of the work done :—

CHILDREN VISITED AT HOME.

| Disease. | No. of Children visited. | No. of visits paid. |
|--|--------------------------|---------------------|
| Scarlet Fever (diagnosed at visit) ... | 27 | 62 |
| Measles | 255 | 257 |
| Chickenpox | 71 | 72 |
| Whooping Cough | 40 | 46 |
| Mumps | 9 | 9 |
| Sore Throat | 93 | 107 |
| Other Cases | 110 | 119 |
| Totals | 605 | 672 |

CHILDREN SEEN AT COUNCIL HOUSE.

| Disease. | | | | | No. of Children
seen. | Attendances
made. |
|---------------|-----|-----|-----|-----|--------------------------|----------------------|
| Ringworm | ... | ... | ... | ... | 117 | 534 |
| Impetigo | .. | ... | ... | ... | 72 | 195 |
| Pediculosis | ... | ... | ... | ... | 53 | 122 |
| Sore Throat | ... | ... | ... | ... | 206 | 417 |
| Scabies | ... | ... | ... | ... | 48 | 270 |
| Other Cases | ... | ... | ... | ... | 303 | 512 |
| Totals | | | | | 799 | 2,050 |

In addition to the above, 1,009 children were specially examined in school.

No treatment has been carried out by the Medical Officer, but appropriate advice has been given and where necessary parents have been urged to obtain medical attendance.

Considerable success has attended the efforts made in connection with Pediculosis and Scabies. The latter, at one time rather prevalent, seems now practically to have disappeared from the schools; while bad cases of Pediculosis are few and far between.

In dealing with dirty and verminous children the hands of Education Authorities are greatly strengthened by the Children Act which came into force on April 1st, 1909.

This Act provides that a Local Education Authority may direct their Medical Officer, or any person provided with the authority of the latter, to examine in any public elementary school the person and clothing of any child attending the school, and in the case of a child found to be infested with vermin or in a filthy condition the Education Authority may give notice in writing to the parent or guardian requiring him properly to cleanse the child and its clothing within 24 hours

after receipt of the notice. In default of compliance with the requirements of the notice, the Medical Officer, or some person empowered by him, may remove the child from school and cause it and its clothing to be properly cleansed. If the child is allowed again to get into a filthy state, the parent or guardian may be proceeded against and mulcted in a sum not exceeding ten shillings.

In 2 cases preliminary notices under the Act were sent out, which proved effectual without recourse to more severe measures.

Scalp Ringworm is the cause of considerable loss of attendance in this District. It is probable that the provision of X-ray treatment at the public expense would in the long run effect a saving of money. Under ordinary treatment severe cases of Ringworm have to be excluded from school from six to eighteen months or even longer; while, with X-rays, cure can usually be effected well within three months.

The more serious infectious diseases affecting school children are appropriately considered in conjunction with the general Public Health Work of the District and are dealt with elsewhere in this Report (see pp. 22-32).

SCHOOL CLOSURE.

During the epidemic of Measles, which visited the District in the spring of 1909, it was considered expedient to close 10 of the infants' departments (for list see p. 30).

BLIND AND DEAF CHILDREN.

Four blind and 8 deaf children from this District are now receiving instruction in special institutions.

MENTALLY DEFECTIVE CHILDREN.

During the year under review only 1 mentally defective child has been educated in a special school. The cases remaining in the schools are receiving specially arranged instruction, consisting largely of manual work, and this instruction is individualised as far as possible.

PHYSICAL AND BREATHING EXERCISES.

In all the schools these are conducted in accordance with the model scheme of the Board of Education. It is impossible at present to estimate the results, but they cannot fail to be beneficial.

SWIMMING AND SPORTS.

The senior boys and girls from all schools attend the public swimming baths once a week during the summer months, by special arrangement. It is the general opinion of the teachers that improvement in physique has in many cases resulted from swimming—the most perfect of exercises.

An association exists for the purpose of organising the sports of all elementary schools in the District, and the Education Committee is considering the provision of one or more playing fields in connection therewith.

MEDICAL EXAMINATION OF TEACHERS.

During the year 29 teachers (17 assistants, 5 pupil teachers and 7 student teachers) were examined by the Medical Officer.

EDUCATION (PROVISION OF MEALS) ACT, 1906.

This Act was in force during 1909, and a total of 15,435 breakfasts were supplied.